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UNITED STATES OF AMERICA  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

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U. S. District Court  
United States District Court

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IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

BALLY MANUFACTURING CORPORATION,  
a Delaware corporation,

Plaintiff/Counterdefendant,

vs.

D. GOTTLIEB & CO., a corporation,  
WILLIAMS ELECTRONICS, INC., a  
corporation, and ROCKWELL INTERNATIONAL  
CORPORATION,

Defendants/Counterplaintiffs

Docket No.  
78 C 2246

Chicago, Illinois  
March 27, 1984

VOLUME XIX

## TRANSCRIPT OF PROCEEDINGS

Before  
HON. JOHN F. GRADY  
Judge

LAURA M. BRENNAN  
OFFICIAL COURT REPORTER  
U. S. DISTRICT COURT  
UNITED STATES COURT HOUSE  
ROOM 1918  
CHICAGO, ILLINOIS 60604  
312-427-4393

1 BALLY MANUFACTURING CORPORATION,  
2 a Delaware corporation,

3 Plaintiff/Counterdefendant,

4 vs.

5 D. GOTTLIEB & CO., a corporation,  
6 WILLIAMS ELECTRONICS, INC., a  
7 corporation, and ROCKWELL INTERNATIONAL  
8 CORPORATION,

9 Defendants/Counterplaintiffs.

) Docket No.  
) 78 C 2246  
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) Chicago, Illinois  
) March 27, 1984  
) 10:55 a.m.  
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10 VOLUME XIX-A  
11 TRANSCRIPT OF PROCEEDINGS  
12 BEFORE THE HONORABLE JOHN F. GRADY

13 TRANSCRIPT ORDERED BY: MR. JEROLD B. SCHNAYER  
14 MR. MELVIN M. GOLDENBERG

15 APPEARANCES:

16 For the Plaintiff/  
17 Counterdefendant:

MR. KATZ  
MR. SCHNAYER  
MR. TONE  
MR. MATHIAS  
MS. SIGEL

18 For the Defendants/  
19 Counterplaintiffs:

MR. LYNCH  
MR. HARDING  
MR. GOLDENBERG  
MR. RIFKIN  
MR. ELLIOTT  
MR. GOTTLIEB

20 Court Reporter:

21 LAURA M. BRENNAN  
22 219 South Dearborn Street, Room 1918  
23 Chicago, Illinois 60604  
24  
25



1 THE CLERK: 78 C 2246, Bally v. Gottlieb, case on  
2 trial.

3 THE COURT: Good morning.

4 MR. KATZ: Good morning, your Honor.

5 MR. TONE: Good morning, your Honor.

6 MR. LYNCH: Good morning, your Honor.

7 THE COURT: Mr. Katz?

8 MR. KATZ: Professor Kayton?

9 IRVING KAYTON, PLAINTIFF'S WITNESS, PREVIOUSLY AFFIRMED.

10 THE COURT: Good morning.

11 THE WITNESS: Good morning, your Honor.

12 DIRECT EXAMINATION (Continued)

13 BY MR. KATZ:

14 Q Professor Kayton, yesterday you testified about the  
15 customs and practices regarding printing of computer pro-  
16 grams by the Patent Office.

17 A Yes, there is, quite directly on what I talked about  
18 yesterday.

19 In the Exhibit 415, the pink bar exhibit of  
20 the Office Actions, at tab G, Bates 140 --

21 THE COURT: Single pink bar?

22 THE WITNESS: Single pink --

23 MR. KATZ: Single pink bar --  
24  
25

Kayton - direct

THE WITNESS: -- bar, but I may have the wrong

Page.

MR. KATZ: -- but I believe that--

THE WITNESS: Let me just see.

BY MR. KATZ:

Q I direct your attention to tab N, as in Nancy.

A Oh, yes, it is --

Q I think the Bates was correct --

A Yes, Bates 140 is right, and it is tab N.

Now, your Honor, the color-coded material is not what I am making reference to at this time. It is the material, the very first paragraph on that page, at the top, above the highlighted material, and it says:

"Receipt of paper No. 146 received November 16, 1982, embodying the program listing as originally filed in the original application, U. S. Patent 4,093,232, is acknowledged. However, such has not been submitted in compliance with 37 C.F.R. 1.96 and MPEP 608.05. Under this new procedure, the submitted listing should be incorporated into the specification (or drawings, as the case warrants) since a reference to unprinted appendices is no longer being accepted by the printer, except where a microfiche has been filed."

Now, you may recall, your Honor, thereafter he said since it was originally filed under the practices, that was okay.

1           The point of this is simply to indicate that  
2 it is such a ministerial function that, as I pointed out  
3 yesterday, the printer often controls what is printed. More-  
4 over, mentioned therein is the current practice involves a  
5 situation wherein microfiche, not part of the specification,  
6 is involved. Now, your Honor, microfiche is just microfilm  
7 with a little frame put into a card densely packed.

8           So here we have a discussion in 1982, November  
9 of 1982, indicating that the practices all the way back have  
10 been truly in-house determined in the Patent Office determined  
11 practices, and as I indicated yesterday, very often the  
12 significant factor was what the printer felt he was comfortable  
13 with handling.

14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
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25

1       ... may be readily compared."  
2       ... Now, that's all that's pertinent to the issue  
3       here.

4       ... Now, immediately below that the Commissioner  
5       points out how, from a practical point of view, this is to  
6       be implemented. He says:

7       ... "Cut up soft copies of the original patent  
8       ... with only a single column of the printed patent  
9       ... securely mounted on a separate sheet of paper may  
10      ... be used in preparing the re-issue specification  
11      ... and claims to be filed."

12       He then points out that amendments in separate  
13      papers may be implemented. And then he says --

14      ... explanation of

15      ... The Anna

16      ... July, 1971, but what I see

17      ... one that.

18      ... On page

19      ... 73 is set forth, and

20      ... The also

21      ... and I believe that

22      ... of the patent,

23      ... re-issue

24      ... "I have seen"

25      ... the side

Q Now, Professor Kayton, was there anything else in the Manual of Patent Examining Procedure in the rule of practice in the Patent Office that bears on this practice?

A Yes, there is.

For the purpose of completeness, what I wanted to do, so there is to my knowledge no stone left unturned that I know of, I'd like to refer to both Rule 173, which deals with the specification and the reissue, and its explanation in the Manual of Patent Examining Procedure. They both appear, your Honor, in the Manual of Patent Examining Procedure.

And what I would like to do is to quote or read that part of 173 and then read the examiner's interpretation and explication of it.

The Manual I happen to have is Revision 7 of July, 1981, but what I am about to read went farther back than that.

On page 381 of the Manual in Section 1411, Rule 173 is set forth, and it says:

"The specification of the re-issue application must include the entire specification and claims of the patent, with the matter to be omitted by re-issue enclosed in square brackets. And any additions made by the re-issue must be underlined so that the old and the new specifications and claims

1 Q Excuse me, Professor Kayton, a second.

2 Could you point out what a soft copy of a  
3 patent is?

4 A Yes. Yes. This is a soft copy of a patent, your Honor.

5 And what is involved from as long as I've been  
6 in patent practice, thirty years, you take this printed patent  
7 and you cut it into columns and you paste each column on a  
8 separate page. That's of the original patent.

9 And the material that you want eliminated you  
10 put in brackets.

11 Then if you want to add material, you might  
12 cut a portion, type in appropriate material, underline it,  
13 and paste the rest of the column after it.

14 That is the way you file a re-issue application.  
15 It is standard practice, and that's what the Commissioner  
16 says is the way you do it based upon that rule.

17 The reason I'm calling attention to this is  
18 because in the rule it says, "The specification of the re-  
19 issue application must include the entire specification and  
20 claims of the patent."

21 I am telling you about this so that this rule  
22 not be thought of as requiring that which is not printed to be  
23 put forth when you file the re-issue application, as the  
24 program listing.

25 And the Commissioner's interpretation below

1 of what should be done, I am suggesting, explains why it says  
2 the "entire specification".

3           The entire specification means, when you have  
4 a printed patent, you may not paste up less than the whole  
5 thing, because if you want to take something out of the pres-  
6 ent patent, you do it by brackets.

7           So the word "entire" in that rule is in refer-  
8 ence to that. And this rule and this practice has been going  
9 for ages.

10           And, therefore, that word bears not at all on  
11 the issue of the program listing that I was talking about  
12 before. Indeed, today microfiche are not part of the patent  
13 that's printed, but they're part of the specification, and  
14 you don't cut up the microfiche and paste it up.

Kayton - direct

And now I think I have said everything I know

of on that subject.

Q Turning to Plaintiff's Exhibit 415, the compilation with the single pink stripe, and particularly at tab U at Bates No. 166, at point 5 on that page 13 of that document, Examiner Goolkasian, who was in the office of the assistant commissioner for patents, and who signed this paper, stated in reviewing the entire proceeding that had taken place before Commissioner Cohen the following:

"With regard to obviousness, the examiner concluded that if the Atari Cyan work on the El Toro model machine is available as prior art, the differences between the claimed subject matter and the El Toro prior art were obvious. Absent the Atari work as prior art, the examiner again refused to reject the claims. It is noted that the examiner took the viewpoint that the use of the microcomputer in a pinball machine was the mating of two technologies and the formation of a new hybrid art. The examiner was of the opinion that the magazine articles which suggest the mating amount to no more than a suggestion to try to make the technologies without indicating of just what is to be modified to accomplish the mating."

Now, Professor Kayton, assuming the credi-



Kayton - direct

2767  
bility of Dr. Schoeffler, what made it possible to accomplish this mating of the two technologies?

A. Well, as he pointed out, the noise problem was what prevented the mating, and the way it was mated was very, very simply. Using as much hardware noise prevention and then recognizing that the rest of the noise could be eliminated with software inexpensively, it was the recognition that this could do it inexpensively that was the literal mating.

No question, as he said, and I know from personal experience, that you could build a copper mesh cage around each machine, the way we used to do it around digital computers when I worked on them 30 years ago, for 20 or 30 or \$40,000, and cut down the noise and ground everything and cut down the noise.

Those were the techniques. But that doesn't make a practical pinball.

The contribution that Schoeffler testified to that appears in Frederiksen that made it work as a practical pinball game was the recognition that after you put in hardware preclusion, noise preclusion things, the rest can be done with software, and that was what was not known. And that's what Dr. Schoeffler testified to and --

MR. GOLDENBERG: Your Honor, I move that all the testimony be stricken; that the record shows what Dr. Schoeffler said. This witness is on the stand to tell you about the

Kayton - direct

1 Practices and usages of the Patent Office. I think it entirely  
2 inappropriate for him to argue to the Court what one witness  
3 has said.

4 THE COURT: Mr. Katz?

5 MR. KATZ: Your Honor, I believe that as an expert  
6 here in patent practice, that he is construing the position  
7 that the Patent Office has taken based on what Dr. Schoeffler  
8 has also testified about on this same point of mating the  
9 technologies.

10 THE COURT: No, I think that what he is trying to  
11 tell me is his own interpretation of what is technologically  
12 novel about this patent, and he is not being tendered as an  
13 expert on that subject. I will grant the motion. The testi-  
14 mony will be stricken.

15 And as far as his testifying to what other  
16 witnesses have said, I obviously don't need that; that's an  
17 independent basis for striking the testimony.

1 BY MR. KATZ:

2 Q Professor Kayton, referring in the same book, in fact in  
3 the same paper, PX 415, at Bates 154, is there any statement  
4 by Mr. Goolkasian, in the Assistant Commissioner's office,  
5 what the original patent is directed to?

6 A Yes, that appears as paragraph 2 on page 154, and more  
7 particularly he indicates that that is what that embodiment  
8 in that patent showed. He points out -- do you want me to  
9 read that?

10 Q Yes, please.

11 A "U. S. Patent Number 4,093,232 --" that is  
12 the original patent --

13 "issued June 6, 1978, is directed to a player

14 operated game apparatus, more particularly, a pin-

15 ball machine having a programmed memory processor

16 operatively connected to control the operation of

17 the machine. The processor activates lights and

18 other responses in response to signaling means.

19 The processor is connected to the various signal-

20 ing means, lights and other responses by the same

21 matrix or multiplexing means (Column 2, lines 19-27;

22 Column 6, lines 8-30). Provision is made to pre-

23 vent adverse effect of electrical noise on the oper-

24 ation of the memory processor (Column 4, lines 1-3;

25 Column 7, line 47)."

1 In the patent those things are specifically  
2 disclosed where he said as a description of the specific  
3 embodiment of the invention that is shown.

4 That, of course, is Mr. Goolkasian's review  
5 of the circumstances. He was not the substantive examiner.  
6 He was the Rule 56 examiner.

7 Q Could you point out how you know that, in which line  
8 references in the original patent, which I believe is Plain-  
9 tiff's Exhibit 4, relate to the particular preferred embodi-  
10 ment?

11 A Here he is describing in Column 2 specifically the em-  
12 bodiment shown, which represents -- I am looking at Column 2  
13 and the lines that he makes reference to and then Column 6 and  
14 the lines that he makes reference to. If you look at the page  
15 with Column 6 on it, it is entitled "Description of the  
16 Illustrated Embodiment" in bold letters, and the specific  
17 exposition in even more detail of what he sets forth is  
18 stated in Column 6, as I indicated, lines 8 through 30. The  
19 title "Description of the Illustrated Embodiment," appears in  
20 Column 5, lines 3 through 6.

21 Q Are the other column designations in 7 also under the  
22 heading "Description of the Illustrated Embodiment"?

23 A Yes, that is correct. It continues on then, yes. Column  
24 7, line 47, continues on with it.

1b1  
Kayton - direct

1 Q Professor Kayton, assuming the credibility of the  
2 testimony of Dr. Schoeffler and Jeffrey Frederiksen with  
3 respect to the differences between the specific program  
4 instructions of the program listing submitted to the Patent  
5 Office, Plaintiff Exhibit 436, and the printout of the specific  
6 program instructions contained in the Flicker standing in the  
7 courtroom, PX-333; and their testimony concerning the  
8 differences between the schematic wiring diagrams of Plaintiff  
9 Exhibit 28, 52 and 53, and the actual circuitboard contained  
10 in the Flicker machine: Could these differences in the speci-  
11 fic program instructions and electronic components have made  
12 any difference in the examiner's determination of the patent-  
13 ability of the claims in the reissue proceeding? And why?

14 MR. GOLDENBERG: Objection, your Honor. That is  
15 surely not an issue which was ever submitted to the Patent  
16 Office. It is an issue which is strictly before this Court,  
17 which this Court must deal with on the basis of the law and the  
18 facts.

19 And there's nothing involved here that this  
20 witness can help you on by any kind of statement with respect  
21 to custom and usages of the Patent Office.

22 It is a question of law to which the counsel  
23 for both parties can address themselves when they choose to do  
24 so, and you will decide.

25 THE COURT: Mr. Katz?

Kayton - direct

1           MR. KATZ: The defendants are going to take the  
2 Position, in fact have taken the position, that the decision  
3 in the Patent Office would have been different if these  
4 differences would have been presented.

5           And our position is that it wouldn't have  
6 been, based on Dr. Schoeffler's testimony.

7           And this witness can testify with respect --  
8 he's the most qualified to determine what effect it would  
9 have had, if any, on the practice.

10          And so if he testifies with respect to that,  
11 which is really, I think, based on his opinion, and that's  
12 what he's here for, and is cross examined on it, it would be  
13 helpful to the Court.

14          MR. GOLDENBERG: Your Honor, I would just add to  
15 it that in putting this kind of question to the witness, what  
16 is attempted to be done is to elicit from the witness a state-  
17 ment as to what a particular examiner may have done or would  
18 have done faced with these facts.

19          I submit there's no way that this witness or  
20 indeed any other witness with a similar background, can  
21 answer that kind of question.

22          THE COURT: What is the particular issue to which  
23 the question is addressed, Mr. Katz?

24          MR. KATZ: The differences, whether the differences  
25 in these details of construction between the machine,

1 circuitry and some of the drawings and the program listing  
2 instructions that were in the machine and the general program  
3 that was submitted as part of the patent, whether those  
4 differences would have made any difference in the examination  
5 of the patent application, particularly in connection with  
6 this reissue.

7 The defendants are saying that they would have  
8 made a lot of difference.

9 And Dr. Schoeffler testified, and so did  
10 Frederiksen, with respect to the nature of almost every single  
11 difference.

12 THE COURT: Well, it seems to me that the differen-  
13 ces are technological differences. Dr. Schoeffler testified  
14 about their significance in those terms.

15 MR. KATZ: He said they weren't material.

16 THE COURT: I understand that.

17 I don't know what this witness can offer  
18 that would give me any assistance beyond what Dr. Schoeffler  
19 testified to.

20 MR. KATZ: He could testify as to why, under Patent  
21 Office practice, it wouldn't have made any difference, why  
22 it wouldn't --

23 THE COURT: He's going to confine himself to patent  
24 Office practice?

25 MR. KATZ: Yes.

Kayton - direct

THE COURT: All right, I'll take the testimony, and I'll strike it if it turns out to be testimony that is really more testimony on the technology involved, because I do not regard Professor Kayton as a witness who's being tendered to me as a witness complement to discuss the technology involved.

I don't think he himself purports to be such a witness.

MR. KATZ: That's correct, your Honor.

THE COURT: So we'll see. Go ahead.



1 THE WITNESS: Would you repeat the question?

2 MR. KATZ: Would you read the question?

3 THE COURT: That's too long ago.

4 BY MR. KATZ:

5 Q Professor Kayton, assuming the credibility of Dr.  
6 Schoeffler and Jeffrey Frederiksen, with respect to the dif-  
7 ferences between the program instructions of the program  
8 listing submitted to the Patent Office, Plaintiff's Exhibit  
9 436, and the printout of the specific program instructions  
10 contained in the Flicker standing in the courtroom, which I  
11 believe is PX333, and their testimony concerning the differ-  
12 ences between the schematic wiring diagrams of Plaintiff's  
13 Exhibits 28, 52 and 53, and the actual circuit board con-  
14 tained in the Flicker machine, could these differences in  
15 specific program instructions and electronic components have  
16 made any difference in the examiner's determination of patent-  
17 ability of the claim in the reissue proceeding, and would  
18 you explain.

19 A Yes.

20 If that testimony is credible, it could have  
21 made no difference in any outcome for the simple reason that  
22 those specifications and descriptions must be construed  
23 through the eyes of the person of ordinary skill, and that  
24 the examiner is charged with doing. Therefore, if it is the  
25 case that a person of ordinary skill would recognize that

Kayton - direct

1 these are insubstantial differences, then it is as if they  
2 don't exist. And this is the kind of thing that occurs fre-  
3 quently in practice.

4 When you have a specification that has in-  
5 volved an electronic circuit or program listings where all  
6 kinds of minor errors can occur, it is indeed to be expected,  
7 it is almost like writing a book and having typographical  
8 errors in them, sometimes, or a line left out. It is to be  
9 construed the way a person of ordinary skill in the art  
10 would do it.

11 Now, if a person of ordinary skill in the  
12 art couldn't recognize these as obvious errors, easy to  
13 take care of and cope with, we'd have another matter. But  
14 my answer is predicated on the credibility of the technical  
15 testimony. And if that testimony is credible, it would have  
16 had no effect in any way on determinations of the examiner.  
17 And that is a standard check made for evaluation.

18 Q During the entire re-issue proceeding, how many patent  
19 and publication references were submitted to the Patent  
20 Office for consideration or otherwise considered by the Patent  
21 Office?

22 A Well, my recollection is that there were a total of  
23 72 different items.

24 Q Referring to the very first Examiner's action in paper  
25 Number 24 which is in PX415, the pink striped book, and it

1 begins at Bates page 4, and particularly referring to Bates  
2 pages 5 through 10, Examiner Hum discusses this evaluation  
3 of the references cited by the protesters and applicants and  
4 he discusses within those pages 17 different references.

5           Would you generally characterize how the  
6 references are described in relation to the invention being  
7 claimed?

8 A       Well, in each instance lists a reference. Several of  
9 them are references that are Section 282 notices here; for  
10 example, on page 5, he mentions, he discusses the MCS4 Manual.  
11 And he describes generally what they show. He points out  
12 with MCS4, it is directed to those skilled in microcomputers,  
13 but does not show specific control or applications or how  
14 such a system could be used to replace the electromechanical  
15 logic of a surface projectile pinball machine.

16           So this reference has some material bearing  
17 on the obvious issue as explained, infra, it would certainly  
18 not contain any anticipatory material. And then he goes on  
19 with the others.

20           In short, what he does is he characterizes  
21 them technologically and then discusses whether or not the  
22 claimed invention in the claims are satisfied. And that's  
23 what he did with those 17 and that is the standard way a  
24 patent application is examined. Indeed, that is representa-  
25 tive of what goes on typically and what he did for the rest

of the entire re-issue proceeding through other papers, some-  
times with greater detail, sometimes with less detail, some-  
times going into the objective indicia of non-obviousness  
and sometimes not. But this is the typical way of deter-  
mining whether or not a patent is to be allowed.

Q

Is the prior art taken into account in the  
prior art?

Q What are the differences?

Are those differences enough to make the  
invention as a whole non-obvious?

A In that consideration the objective indicia  
of non-obviousness, the secondary conditions, are taken  
into account. That is what the law requires. That is what  
the Supreme Court requires, and that is the way to determine  
it.

Q Professor Kayton, I refer you the section in F. 101  
to H. as in Mary, which is paper number 101, at dates earlier  
100, and ask you if the examiner who made the rejection pro-  
ceeds to reaching his final decision holding the claims patent-  
able over the prior art considered any evidence of non-obvious-  
ness as an indicator of non-obviousness?  
A Well, clearly he did. He considered the evidence of non-obvious-  
ness with the issue of the law, and the 20 claim articles  
part of it, and were part of the evidence.

Q Now, the issue of the law, and the 20 claim articles  
part of it, were part of the evidence. The evidence of non-obvious-  
ness was part of the evidence.

Kayton - direct

1 Q Did he discuss other references in the same fashion  
2 throughout the proceedings?

3 A Yes, that is exactly what he did, and that is what every  
4 examiner does all the time as the standard way for examining  
5 a patent application and determining what is required to be  
6 determined:

7 Do the claims appear to be different from the  
8 prior art?

9 What are the differences?

10 Are those differences when you look at the  
11 invention as a whole unobvious?

12 In that consideration the objective indicia  
13 of non-obviousness, the secondary conditions, must be taken  
14 into account. That is what the MPEP requires. That is what  
15 the Supreme Court requires, and that is the way examiners do  
16 it.

17 Q Professor Kayton, I refer you now again in PX 415 to  
18 Tab M, as in Mary, which is paper number 145, at Bates number  
19 126, and ask you if the examiner during the reissue proceed-  
20 ings in reaching his final decision holding the claims patent-  
21 able over the prior art considered any evidence of commercial  
22 success as an indicator of non-obviousness?

23 A Well, clearly he did. Items 20, 21, and 22 deal express-  
24 ly with the issue of the license to Stern Electronics, the  
25 fact that \$700,000 were paid in royalties by Stern to Bally,

1 and that there was industry-wide acceptance of the electronic  
2 solid state pinball games, as evidenced by the Playmeter  
3 survey of November, 1978, which interestingly enough, Exam-  
4 iner Hum himself introduced. This was not introduced by  
5 either the protesters or the applicants, to the best of my  
6 recollection, but he independently discussed that.

7 Q Was he justified as an examiner in relying on the  
8 Playmeter survey under Patent Office practices?

9 A Yes, on two grounds. First, as an expert, if this was  
10 the kind of thing that experts in that field rely on, then  
11 certainly he was under Federal Rule of Evidence 703, but  
12 also if it was the kind of thing that was of common know-  
13 ledge, he was entitled to do it under what is a variant  
14 of judicial notice, examiner's notice. If it is standard,  
15 widespread, notorious, he is entitled to rely on that.

16 Q The defendants in the re-issue proceedings in Plain-  
17 tiff's Exhibit 414, tab 31, at Bates 415, contended that the  
18 license agreement is not an indicator of non-obviousness.

19 Do the facts of record in the re-issue pro-  
20 ceedings support the finding of the examiner on that issue  
21 or do they refute it?

22 A Well, it seems clearly that they do. The license was  
23 in the re-issue proceeding, and it seems clear to me from the  
24 license that there was only one patent extant that was being  
25 licensed, namely, the Nutting and the Frederiksen patent.

1           The protesters in their papers made reference  
2 to a Bracha patent being licensed, but there was no Bracha  
3 patent at the time. The Bracha patent didn't even issue  
4 until a year and a half after the Stern license went into  
5 being. Therefore, based upon that, it is entirely reason-  
6 able for the examiner to consider that license and the pay-  
7 ment of royalties attributable to the Nutting and Frederik-  
8 sen patent.

9           No royalties could be due on a patent applica-  
10 tion until it issues. Moreover, until the patent applica-  
11 tion issues, you don't even know whether it ever will issue,  
12 or if it does issue, what its claims will cover.

13           For that reason I believe that commercial  
14 success, due to those listed items, 20 and 21, are a clear  
15 indicator of commercial success causally connected to the  
16 Nutting and Frederiksen patent.

1 Q Was the license agreement to Stern broad enough to  
2 include the pending Bracha patent application?

3 A Yes. It was broad enough to include the application.  
4 It did.

5 Interestingly, also, the examiner testified  
6 that he was in fact aware of the contents of that license  
7 when his deposition was taken.

8 MR. GOLDENBERG: Your Honor, I move that answer  
9 be stricken. This witness is giving his interpretation of  
10 a legal document.

11 THE COURT: Overruled.

12 BY MR. KATZ:

13 Q Was Examiner Hum the examiner on the Bracha application  
14 as well as the examiner on the original and the reissue of  
15 the Nutting and Frederiksen patent application?

16 A Yes, he was.

17 When he was the examiner on the original  
18 patent application, he was not a primary examiner. He was  
19 an assistant examiner.

20 When he was examiner on the re-issue applica-  
21 tion, which issued to the patent in suit, and on the Bracha  
22 patent, which issued in 1980 -- I've forgotten the exact  
23 date -- he was a primary examiner for some years then, also.

24 So he had examined all three of those.  
25 Q The Stern license was effective and executed on October



1 5, 1978. Do you recall when the Bracha patent was granted  
2 relative to that date?

3 A It was 1980. It was about a year and a half later

4 Q April 15?

5 A April 15, right.

6 Q Assume now for the purpose of this question that all of  
7 the coin-operated games made and sold by Bally referred to  
8 in the Playmeter survey mentioned in finding 22 of the  
9 examiner embodied in some way the invention of the Bracha  
10 and Englehardt patent application, which was pending at  
11 the time.

12 And with that assumption, is there anything  
13 in the record of the Bracha application, that is, the Bracha  
14 certified file history which has been marked Plaintiff Ex-  
15 hibit 423, and the Nutting re-issue proceedings, that shows  
16 that the examiner attributed the commercial success of  
17 those coin operated games to the Nutting invention and not  
18 to Bracha?

19 A Yes.

20 Q Do you understand the question?

21 A Yes, I do. Yes. And indeed there are.  
22  
23  
24  
25

1 Q And what is that?

2 A Well, to begin with, Examiner Hum, since he was exam-  
3 ining both the reissue application and the Bracha application,  
4 knew what the two different sets of claims involved and what  
5 the differences between them were.

6 In short, he knew what Frederiksen was claim-  
7 ing his invention to be and what Bracha was claiming his in-  
8 vention to be.

9 Now, in the Bracha application the commercial  
10 prototypes of the Bally machines, namely, the Bow and Arrow  
11 and the Boomerang, were disclosed in a Rule 131 affidavit.

12 And that is an affidavit that demonstrates  
13 that the claimed invention was in fact invented at a par-  
14 ticular time.

15 Therefore, it was the case necessarily that  
16 Examiner Hum knew about the relationship of the Bracha claims  
17 to the commercial prototypes.

18 Moreover, early on in the prosecution of the  
19 reissue application the manuals for the coin-operated com-  
20 mercial arcade games Freedom and Night Rider were submitted.

21 Well, that was the same examiner. And it was  
22 therefore the case that the commercial success for which the  
23 Playmeter survey made reference to was before the examiner  
24 fully.

25 In short, the examiner knew what the Bracha

1 invention was, he knew what the Frederiksen invention was,  
2 he knew what the commercially successful games were, and  
3 he nonetheless attributed to the Frederiksen invention com-  
4 mercial success, based upon his full knowledge of everything  
5 having to do with the issue.

6 I suggest, therefore, that that combination of  
7 documents and processing means that at least to some extent  
8 he believed commercial success was due to the Frederiksen  
9 invention.

10 Q Based on the record of the re-issue proceeding for the  
11 Nutting and Frederiksen patents, and the record in the prose-  
12 cution of the Bracha and Englehardt patent, was the examiner's  
13 conclusion under his finding number 22 in attributing the  
14 commercial success of the Bally coin operated game to the  
15 Nutting and Frederiksen invention appropriate under patent  
16 practices and procedures in the Patent Office?

17 A It was appropriate.

18 Whether or not he could be influenced one way  
19 more than another way was totally his determination. But  
20 using those kinds of evidence and information would be of  
21 course appropriate.

Kayton - direct

Q Is there any basis in the record for determining which the examiner considered an improvement and which he considered a basic invention?

A Well, there is no question but that the Frederiksen and Nutting patent is first and, therefore, that necessarily is the basic invention. And he knew that to be the case from the relative prosecution history of the two applications.

Q Was the Frederiksen and Nutting invention cited as prior art against the Bracha?

A Yes, that was the case.

Q Professor Kayton, you have heard or read the testimony in this case concerning a number of facts dealing with commercial success of this invention, and I refer you to the graph of Plaintiff's Exhibit 381-B and a table, 381-A, about which Mr. Nieman testified. And I would like to enumerate the particular facts that I have in mind:

First, the fact that after the introduction of the matrix multiplexed microprocessor-controlled pinball machines of the present invention into the commercial market, there was a rapid displacement of all of the prior art electro-mechanical pinball machines using the prior art technology;

Second, that the plaintiff who introduced these new machines embodying the present invention suddenly changed its marketing position from, I believe it was characterized as a poor No. 3, to a strong No. 1;

Kayton - direct

1 And third, that Stern Electronics, a company  
2 formed from the defunct Chicago Coin Industries, having almost  
3 no sales whatsoever, suddenly after copying and licensing the  
4 invention from the plaintiff, rose suddenly to a significant  
5 position in the industry;

6 And fourth, that as shown in Exhibit 381-B --

7 Excuse me, 381-A -- we need another, PX --

8 MR. KATZ: Excuse me, your Honor, I need one more  
9 exhibit that Mr. Nieman just introduced. Excuse me.

10 (Brief interruption.)

11 MR. KATZ: This is another commercial tabulation  
12 and this was Plaintiff's Exhibit 470 that was introduced by  
13 Mr. Nieman previously, 1974 to 1982 sales with production  
14 figures.

15 BY MR. KATZ: Office must be given consideration by the

16 Q (Continuing) That there, from this document, that there  
17 were over \$500 million worth of electronic pinball machines  
18 made in accordance with this invention, sold by Bally, from  
19 the date of introduction initially by the plaintiff while the  
20 prior art machines went to about zero as noted in the graph  
21 of Exhibit 381-B, all in a period of about two years.

22 Now, given those facts, Professor Kayton,  
23 had this evidence been available, could it have been intro-  
24 duced into the Patent Office during these reissue proceedings  
25 on the issue of non-obviousness of the invention?

Kayton - direct

A Yes, very --

MR. GOLDENBERG: I'm sorry, may I have the last part of the question?

BY MR. KATZ:

Q Had this evidence been available, could it have been introduced into the Patent Office during these reissue proceedings on the issue of non-obviousness of the invention?

MR. GOLDENBERG: Thank you.

BY THE WITNESS:

A Yes, it could have in a standard procedure known as a Rule 132 affidavit of declaration, which is a form of submitting evidence having to do with the secondary considerations or the objective indicia of non-obviousness, a standard technique and one which in accordance with accepted practice in the Patent Office must be given consideration by the examiner. He may not ignore it. And he must take it into account in making the determination of patentability or not.

1b1 Kayton - direct

1 Q In your opinion, based on your experience in Patent  
2 Office practice, customs, and procedures, what effect, if  
3 any, would such a submission of evidence of this type have had  
4 on the Commissioner's decision with respect to the issue of  
5 non-obviousness of the invention; that is, what bearing would  
6 it have had on that issue?

7 MR. LYNCH: Objection, your Honor. I believe that  
8 such an opinion is inappropriate to elicit from any expert,  
9 what the examiner would have done.

10 THE COURT: Well, I think the answer is implicit  
11 in the answer to the last question.

12 MR. KATZ: I will withdraw it.

13 THE COURT: It is admissible because it is probative,  
14 and if it is probative, it is --

15 MR. KATZ: It is helpful. I will withdraw the  
16 question, your Honor.

17 THE COURT: -- to support the question of non-  
18 obviousness and the conclusion of non-obviousness.

19 BY MR. KATZ:

20 Q Professor Kayton, turning to another subject, as part  
21 of your teaching activities in connection with patent practice,  
22 do you teach what patent claims are and how they are to be  
23 interpreted?

24 A Yes, that is a major part of my activities.

25 Q To whom do you present this kind of information in the



Kayton - direct

ordinary course of your various teaching activities?

A. It is taught at every level of patent practice at different levels of sophistication, but it is the beginning part of patent practice and is in my book, "Kayton on Patents," and used to be in my case book. It is a major part of the material that I teach in the Patent Office examination review course, the Patent Bar.

Q. Do those instructions and lectures and so on that you have provided and the writings that you have given apply to examiners as well as practitioners?

A. Of course, it applies universally.

Q. Can you estimate how many patent practitioners you have directly taught on these basic concepts of claim construction and interpretation during the 20 years you have been at George Washington University Law School?

A. That is pretty easy to tabulate, and if we are talking about the basic instruction and not more sophisticated, it is approximately 2,000 practitioners.

Q. Professor Kayton, is there a recognized form of claim construction that deals with functional language?

A. Yes, there is.

Q. Would you explain what that area is and how it is recognized?

A. Yes, the last paragraph of Section 112 provides for drafting claims without --



Kayton - direct

MR. GOLDENBERG: Your Honor, as I hear the witness answer, I do object. This is set out in the statute and it is a question of legal construction of the statute and legal interpretation, which again, as I say, to the extent that the witness talks about this, he invades the province of the Court and should not be heard.

THE COURT: Mr. Katz?

MR. KATZ: Your Honor, my intention was to elicit testimony from Professor Kayton with respect to basic claim drafting principles that are not specifically set out in the statute, and we all know what the statute says, and the particular format of the claims that are used in this particular patent, in this particular application, and the meanings attributable to those particular forms of construction, and then I intend to elicit from Professor Kayton his testimony with respect to the manner in which Dr. Schoeffler read the claims on the accused device.

THE COURT: No, I won't accept it. This is a matter of law. I want to hear argument of counsel. I don't want to hear argument from the witness. I think it is unseemly, and your objection is sustained.

1-1b1

Kayton - direct

1 BY MR. KATZ: [REDACTED]

2 Q [REDACTED] With respect to the reissue proceeding, Professor Kayton,  
3 what does the record show was the position of each of the  
4 parties to the reissue proceeding, that is, the plaintiff on  
5 the one hand and defendants on the other, in respect to whether  
6 claim 45, for example, required matrix multiplexing?

7 A [REDACTED] MR. GOLDENBERG: Your Honor, same objection.

8 [REDACTED] THE COURT: Same ruling.

9 [REDACTED] MR. KATZ: Your Honor, may I address that question?

10 [REDACTED] THE COURT: All right.

11 A [REDACTED] Well MR. KATZ: During the course of the reissue pro-  
12 ceedings the parties stated various positions in the Patent  
13 Office with respect to the meaning of the claims.

14 [REDACTED] THE COURT: Well, if you want to show that the  
15 defendants took a position different from the one they're  
16 taking here, I'll permit that.

17 [REDACTED] MR. KATZ: Okay.

18 [REDACTED] THE COURT: If you're just going to have this wit-  
19 ness rehash the legal arguments that are being made in this  
20 trial and that have been made in your briefs, and will be made  
21 again at the conclusion of the evidence, I don't want to hear  
22 it.

23 [REDACTED] MR. KATZ: No. What I wanted to show was that the  
24 defendants are taking -- had taken a position different than  
25 the position they're taking here.

Kayton - direct

THE COURT: All right, that's permissible. Go ahead.

BY MR. KATZ:

Q Now, Professor Kayton, what position did the defendants take in the reissue proceeding with respect to the meaning of the language of Claim 45?

A Basically, from the excerpts that I have, they either explicitly or implicitly construed claim 45 to include matrix multiplexing.

Q And what's the basis for that statement?

A Well, at the outset, in a paper that is not in one of my compendia collections, but is in Plaintiff's Exhibit 1, the master list, at Volume 9, tab 63, the paper which begins at Bates 607, at page 612 -- and I have a copy excerpted portion of that here -- in the middle of the page, in discussing an argument of the applicants and responding to it, protesters say:

"Although protesters cannot conceive of the need for such a tertiary reference, the record is replete with such teachings. For example, the examiner recognized in paper No. 46 at page 5 that sequentially and cyclically multiplexed matrix arrangements were known and moving mass arcade games."

And this is responding indeed to claims

3

Kayton - direct

1 dealing with the question of whether there is non-obviousness  
2 over prior art.

3 Then in the last full paragraph protesters  
4 go on to state:

5 "Yet additional prior art precedent for this  
6 is provided by Burnside, attached in Exhibit A1 in  
7 the Burnside patent" -- and this is, what follows,  
8 all underlined -- "the Burnside patent, a matrix  
9 of playfield switches in a pinball game" -- end of  
10 the underlining -- "cyclically and sequentially  
11 scanned by an electromechanical controller."

12 This indicates what it indicates, of course,  
13 but is responding to the issue of whether, one, matrix multi-  
14 plexing is in the claims, and whether the examiner believes  
15 it is and whether the prior art has it.

16 Then in Plaintiff's Exhibit 414, tab 25,  
17 which is the black coded protesters' papers, double bar --

18 Q What was the page number?

19 A I'm going to get to that.

20 At tab 3 -- I'm sorry -- tab 25, Bates 288,  
21 if we go down to the last -- the first sentence of the last  
22 paragraph, the protesters state:

23 "Moreover, when the Nutting patent" --  
24 underlined patent -- "is reviewed, what is taught  
25 other than multiplexing inputs and digits arranged  
in a matrix?"

2

1 MR. KATZ: Excuse me a second, Professor Kayton.

2 Do you have it?

3 THE WITNESS: This is on Bates 28, the last para-  
4 graph, first sentence.

5 Yours may be color-coded.

6 THE COURT: No, I have it.

7 THE WITNESS: It is the color-highlighted sentence  
8 and the last word of that is in the matrix.

9 BY MR. KATZ:

10 Q Now, are you aware of any other references to what  
11 Atari's, I believe, position was with respect to the inven-  
12 tion as stated in the re-issue proceedings?

13 A Yes. Atari, their attorneys spoke--

14 MR. LYNCH: Objection, your Honor. That constitutes  
15 hearsay. If Atari's opinion of this is relevant, it can't  
16 be established by this witness.

17 THE COURT: What--

18 MR. KATZ: There were papers filed; Atari is, of  
19 course, was, although not a party directly, they were sort  
20 of a third party to these proceedings, all of these prior  
21 art developments and so on came out of their files, and they  
22 were always represented by counsel.

23 THE COURT: Well, I don't think you can offer  
24 against these defendants something that was said by Atari.  
25 I mean it might be admissible for some other purpose.

1 MR. KATZ: I think the purpose that I am offering  
2 it for is merely to show that everyone in the re-issue pro-  
3 ceedings conceived of the or recognized the invention as  
4 matrix multiplexing, and that was an issue that has been  
5 brought up here.

6 MR. LYNCH: Same objection, your Honor.

7 THE COURT: Well, I suppose that's a circumstance,  
8 the fact that someone else thought it was that way. It is  
9 not being offered to prove that it was accepted that way,  
10 but simply that somebody else thought it was. I will over-  
11 rule the objection. I think it is admissible as circum-  
12 stantial evidence.

13 BY THE WITNESS:

14 A Yes, going then to the Plaintiff's Exhibit 413, the  
15 blue-coated applicant's papers, the single blue bar at tab  
16 3, Bates 42, color coded or highlighted in pink at the  
17 bottom, it states that:

18 "In particular, it was stated by Atari's  
19 patent attorney in a letter of December 18, 1978,"  
20 footnote 50 indicates an Exhibit C attachment,

21 "...on behalf of Atari that --" going on to  
22 page 43 then, which should also be highlighted in pink --

23 "We have reviewed the specification and claims  
24 of the 232 patent."

25 That's the original patent.

1 "And from a literal reading, it would appear  
2 that all claims are limited to a microprocessor  
3 or computer-based electronic pinball machine in  
4 which at least the ball and bumpers sense switches  
5 and response lamps are multiplexed to the computer  
6 by means of a matrix arrangement, such as that  
7 shown in your figure 4 and figure 5. None of the  
8 Atari microprocessor based electronic pinball ma-  
9 chines employ such matrix multiplexing."

10 And then the attorneys went on to say:

11 "Thus, it was and is Atari's position that no  
12 commercial MPU based pinball machine ever sold by  
13 them used the invention claimed in the Nutting, et  
14 al patent."

15 Now, other circumstances that were mentioned  
16 were the examiner in several places did exactly the same thing.  
17 BY MR. KATZ:

18 Q And could you point to the examiner's statements?

19 A Yes. For that we go to the pink-barred book, Plain-  
20 tiff's Exhibit 415, and the first place that I would like to  
21 go to there is tab J at Bates 94, the yellow highlighted  
22 material.

23 "The reissue applicant maintaining that the  
24 invention does not reside in any one element alone  
25 but in the total structural combination of a

Kayton - direct

1 matrix multiplexed computer controlled pinball  
2 game as planned."

3 to : Now, this is the examiner saying what the  
4 applicants say.

5 Then, "down at the bottom he says:

6 "Thus, from the evidence of Bracha  
7 it would appear that the disclosed subject  
8 matter surrounding conception of a multiplexed  
9 microprocessor controlled pinball machine cover-  
10 ing the features of most of the broadly defined  
11 claim --" I suppose it should be "claims" --  
12 "is sufficient absent concrete evidence to the  
13 contrary."

14 The characterization then of what the inven-  
15 tion is for the examiner by the applicants is what he is  
16 responding to.



2-2b1  
2  
1 Kayton - direct

2 Then at tab L, Bates 117, the examiner states:

3 "Applicant is also being given the opportunity  
4 to further elaborate upon the obviousness issue  
5 being raised by the protesters involving the  
6 references of Burnside, Durant, MCS 4, and the  
7 Electronics articles of March 1, '73 and March 21,  
8 '74. That is how specifically the claims distin-  
9 guish over these two teachings and the combination  
10 of these two references with the above-named  
11 showings."

12 Now, your Honor, I mention this as a predicate  
13 for the next paper. This sets the background. The protesters  
14 have said it is obvious and the examiner is giving the  
15 applicants an opportunity to respond.

16 Now, if we then turn to tab, now we have to go  
17 to Plaintiff's Exhibit 413, which is the applicant's response,  
18 at tab 20, which will be the third volume, the three blue bars  
19 and that's at Bates 693, at 693 we can see -- that's right  
20 actually at the front tab 20, and 693 is a few pages into it,  
21 what I have highlighted is to show this statement dealing  
22 with the issues that the examiner requested information. And  
23 it is making reference to the Burnside and Durant patents  
24 exactly as the examiner asked.

25 And it is mentioned that the examiner requested  
information on the relevance or non-relevance of the Burnside

2

Kayton - direct

1 and Durant patents, and more particularly, to specify how the  
2 claims distinguish over these two teachings, et cetera.

3 If we go to 696 then, down at the bottom, we  
4 have the discussion that the applicants talk about. The  
5 sentence in which the highlighted material is, starts with,  
6 at the bottom, "That is although the lamps are mechanically  
7 arranged in the back book in the form of a bingo card,"  
8 et cetera, underlined, "They are clearly not electrically  
9 connected in a matrix in rows and columns, which is how the  
10 term is used in connection with the instant application. And  
11 therefore, the distinction given by the applicant talks  
12 about the matrix."

13 Now, after that, those claims were allowed  
14 by the examiner in index tab M without anything interfering  
15 therebetween on that subject.

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Kayton - direct

1 MR. GOLDENBERG: Your Honor, this answer has gone  
2 on so long that perhaps my memory has failed me on what the  
3 question was, but I thought the question was what did the  
4 defendants have to say about Claim 45, and I have --

5 THE WITNESS: Oh, no, it was the examiner, your  
6 Honor.

7 MR. KATZ: This was a question about the examiner.

8 THE WITNESS: This was the examiner.

9 MR. KATZ: How the examiner treated the language,  
10 the multiplexing means language.

11 MR. GOLDENBERG: Then my memory did fail me, but  
12 I trust the Court will understand the reason why.

13 BY THE WITNESS:

14 A As I said then, the claims were allowed on that basis.

15 Of course, Bally's attorneys discussed that  
16 extensively throughout the proceedings and said it again and  
17 again.

18 BY MR. KATZ:

19 Q So then, Professor Kayton, based on your recollection or  
20 review of the entire file wrapper from the re-issue proceed-  
21 ings, is it your view that the defendants have never asserted  
22 the position that they are asserting here at this trial in  
23 respect to the breadth or scope of the claims?  
24 A I haven't seen in the entire reissue proceeding a state-

25 ment by them that says matrix is not part of the claimed

1 invention, anywhere.

2 Q Before turning to another point-- let me strike that.

3 With reference to the original prosecution,  
4 that is, the prosecution of the original parent patent, Mr.  
5 Kayton, and turning to the positions asserted by the plain-  
6 tiffs' attorney during that proceeding, what was the appli-  
7 cant's position stated in that record with respect to whether  
8 the claims required matrix multiplexing?

9 A The express statement that it required matrix multi-  
10 plexing in a claim where there were means plus function  
11 limitations and the word "matrix" is not involved, and I  
12 can point to that.

13 Q Plaintiff's Exhibit --

14 A 2.

15 Q -- 2 is the original file history.

16 A Right. Now, I have that, and what I am going to do  
17 is to turn to Bates Number 124 in that application.

18 Down at the bottom is the discussion that  
19 is of interest to me, but I will explain something that is  
20 also literally there.

21 Claim 27 of this original application became  
22 Claim 1 of the original and reissue patent. So what we are  
23 talking about here in fact is Claim 27, and that is original  
24 patent Claim 1 and reissue Claim 1.

25 Here Mr. Katz said at the bottom:

1 "Incidentally, it should be particularly  
2 noted that the Ariano patent does not appear to  
3 disclose any time division multiplexing. Addition-  
4 ally, although the Ariano patent might be con-  
5 sidered to disclose a matrix of elements, they do  
6 not appear to be multiplexed as in the game of the  
7 present application. Thus, there is no basis for  
8 the rejection of Claim 27 or any of the other claims  
9 in this reference."

10 The significant thing about this original  
11 application is that that claim had means plus function

12 clauses. 13 Notice in another claim where it was not  
14 means plus function but straight hardware, about which Dr.  
15 Schoeffler was examined, I believe, by Mr. Lynch, the word  
16 "matrix" was required to be put into that claim, but when you  
17 had means plus function clauses, that was not necessary be-  
18 cause that, of course, as we all know, is construed based  
19 upon the specification and equivalents thereof, and the  
20 specification was a matrix multiplexed system.  
21  
22  
23  
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1 Q Were there any statements made by plaintiffs, that is,  
2 Belly's attorneys, on this same issue that referred specific-  
3 ally to Claim 45, Claim 95, or the other claims specifically  
4 being asserted by the plaintiffs here?

5 A Yes. There were express statements on that subject.

6 That appears in Plaintiff's Exhibit 413. Of  
7 course, that's the blue one, the single bar, the first volume,  
8 at tab 3, Bates 84, I believe it is.

9 Yes. At the top of 84 we could see reference  
10 to the claims that were under discussion.

11 Now, your Honor, Claim 16 of the application  
12 ultimately became Claim 95 of the reissue patent. And Claim  
13 45 of the reissue patent is one of those application claims  
14 listed, but I don't remember which one, but I know it is  
15 one of them.

16 Then if we go to the discussion of those  
17 claims at Bates 88, four pages later, right in the middle,  
18 in the pink highlighted portion, it says -- well, maybe it's  
19 not pink highlighted in yours -- but right in the middle it  
20 says:

21 "Second, the fact that Atari abandoned the  
22 Cyan system ultimately shows that they did not  
23 recognize the multiplexed matrix system as a  
24 feasible approach, which meant that it was not  
25 obvious to them at that time."

1 And therefore, the applicants were arguing  
2 patentability in part on that combination of matrixing.

3 And then finally at 119, part of the same paper,  
4 they state:

5 "Moreover, Atari's lack of reduction to  
6 practice and complete abandonment of the subject  
7 matter of the invention indicates that it was ac-  
8 tually unobvious to Atari that the multiplexed  
9 matrix system of applicant's claims should be  
10 adopted for pinball machines in order to produce  
11 a practical and cost-effective commercial product."

12 Q According to accepted practices and usages with so-  
13 called means plus function claims, was it proper practice  
14 to recite the matrix multiplexing means merely as multi-  
15 plexing means in the claims of the patent in suit during the  
16 prosecution of the case?

17 MR. GOLDENBERG: Objection.

18 THE COURT: Sustained.  
19  
20  
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1 BY MR. KATZ:

2 Q Turning now to another subject, during the reissue pro-  
3 ceedings, Professor Kayton, did the defendants charge the  
4 plaintiffs and its representatives with violating Rule 56 of  
5 the Patent Office rules dealing with fraud and misconduct in  
6 connection with the original patent application and the  
7 re-issue application?

8 A Yes, they did.

9 THE COURT: Let me see if we can shorten this up.  
10 The findings of no anticipation pretty much  
11 overlap the no-fraud findings, don't they?

12 MR. KATZ: Well, the question was, there was a  
13 question of whether it was material or not, and then what  
14 the conduct of the defendant was with respect to it.

15 The examiner found some things were material,  
16 some weren't material. He looked at conduct.

17 There were also references here, for example,  
18 there were references that the defendant charged the plain-  
19 tiff with failing to disclose to the Patent Office, but which  
20 weren't part of the 282 notice. In other words, they don't  
21 rely on those references now, but they --

22 THE COURT: It seems to me that this is something  
23 that would come up in rebuttal.

24 At the moment, here, the posture of this case  
25 wouldn't remotely enable me to find any fraud on the Patent



1 Office at the conclusion of the Plaintiff's case.

2 If there is going to be any issue in that  
3 regard, it will be raised by the defendants in their case.  
4 And it seems to me that the time to respond would be in the  
5 plaintiff's rebuttal case.

6 Do you agree?

7 MR. KATZ: We could put that on in rebuttal, your  
8 Honor.

9 THE COURT: All right. And you can just point to  
10 the -- I'm not sure what purpose it serves to have Professor  
11 Kayton point to things in these documents that you could  
12 just as easily point to yourself.

13 So it wouldn't involve bringing him back here  
14 necessarily, it seems to me.

15 Now, if there's anything other than that that  
16 you want to point out, go ahead. But let's save the rebuttal  
17 for the rebuttal.

18 MR. KATZ: Okay. Well, perhaps we could -- it's  
19 pretty close to 12:30 -- I could take a look. I might have  
20 very few questions left then, and maybe I would be able to  
21 just finish it up in a few minutes when we get back.

22 THE COURT: All right.

23 MR. KATZ: And then I would be done.

24 THE COURT: All right, let's recess then until 1:45.

25 MR. KATZ: Thank you, your Honor.

(Recess at 12:20 p.m. to 1:45 p.m.)

1 BALLY MANUFACTURING CORPORATION,  
a Delaware corporation,

2 Plaintiff/Counterdefendant,

3 vs.

4 D. GOTTLIEB & CO., a corporation,  
5 WILLIAMS ELECTRONICS, INC., a  
6 corporation,

7 Defendants/Counterplaintiffs.)

) Docket No.

) 78 C 2246

) Chicago, Illinois

) March 27, 1984

) 1:50 p.m.

8 VOLUME XIX-B

9 TRANSCRIPT OF PROCEEDINGS

10 BEFORE THE HONORABLE JOHN F. GRADY

11 TRANSCRIPT ORDERED BY: MR. JEROLD B. SCHNAYER  
MR. MELVIN M. GOLDENBERG

12 APPEARANCES:

13 For the Plaintiff/  
Counterdefendant:

MR. KATZ  
MR. SCHNAYER  
MR. TONE  
MR. MATHIAS  
MS. SIGEL

16 For the Defendants/  
17 Counterplaintiffs:

MR. LYNCH  
MR. HARDING  
MR. GOLDENBERG  
MR. RIFKIN  
MR. ELLIOTT  
MR. GOTTLIEB

21 Court Reporter: LAURA M. BRENNAN  
22 219 South Dearborn Street, Room 1918  
23 Chicago, Illinois 60604

1 MR. KATZ: I just have probably less than a dozen  
2 questions.

3 IRVING KAYTON, PLAINTIFF'S WITNESS, PREVIOUSLY AFFIRMED

4 DIRECT EXAMINATION (Continued)

5 BY MR. KATZ:

6 Q Professor Kayton, Dr. Schoeffler testified in response  
7 to examination by Mr. Lynch that he had not read the file  
8 history of the claims in this action. Based on your hearing  
9 and reading of the testimony of Dr. Schoeffler, did he con-  
10 strue those claims in any way violative of the prosecution  
11 history in the Patent Office?

12 MR. GOLDENBERG: Objection, your Honor. I think it  
13 most improper to ask one witness to comment on the testimony  
14 of another.

15 THE COURT: Well, no, I think he is being asked to  
16 state a fact; namely, whether the claim was construed by the  
17 plaintiff's witness in this case any differently than it has  
18 been in the Patent Office.

19 MR. GOLDENBERG: All right.

20 THE COURT: That's a fact. Overruled.

21 MR. KATZ: Thank you.

22 BY THE WITNESS:

23 A It was consistent with the entirety of the reissue  
24 prosecution of which I am aware, and I am aware of it.

25 BY MR. KATZ:

Kayton - direct

1 Q Now, Professor Kayton, referring to the drawing,  
2 particularly Figure 5 of the reissue patent in suit which is  
3 the Plaintiff's Exhibit 3, both -- do you have that?

4 A Yes.

5 Q Both Mr. Frederiksen and Dr. Schoeffler testified that  
6 the so-called steering diodes shown as diodes 98 in Figure 5,  
7 which were indicated as being in the matrix to prevent so-  
8 called sneak paths, were intended to be shown for every  
9 switch in the matrix. Do you see that? Do you recall that  
10 testimony?

11 A Yes.

12 Q Based on the disclosure in the specification with  
13 respect to those diodes, which was also the subject of  
14 testimony by Mr. Frederiksen and Dr. Schoeffler, is the manner  
15 in which those diodes are depicted in Figure 5 of the drawing  
16 in accordance with normal practices in the Patent Office for  
17 drawings of electrical circuits?

18 A Yes, they are. Very, very typically, when you have a large  
19 electrical circuit with iterated segments, sequences of  
20 channels of wires, you don't show it all and you don't put  
21 all the elements in. The broken line --

22 MR. LYNCH: May it please the Court, your Honor,  
23 I don't believe this witness is tendered as an expert in  
24 electrical drawing practice or electronics generally. That's  
25 what he is testifying about; not about Patent Office practice.

Kayton - direct

THE COURT: Well, I think he is testifying about Patent Office practice in regard to drawing electrical circuits. Now, ask him what experience he's had specifically with the drawing of electrical circuits in the patent applications.

1 BY MR. KATZ:

2 Q Professor Kayton, what experience have you had with  
3 respect to Patent Office practice in connection with draw-  
4 ings of electrical circuits?

5 A Well, I have written and prosecuted many patents deal-  
6 ing with electrical circuits; but, your Honor, what I am say-  
7 ing is generically applicable to non-electrical drawings as  
8 well, where you have repeated sequences of materials. It  
9 is universal to patent drawings. But in fact, I have prose-  
10 cuted, if you look, your Honor, at the cover of Kayton on  
11 Patents, you see wave guide drawings. Those are electro-  
12 magnetic circuits. I wrote that patent and I have written  
13 many electrical patents. But it is generally applicable to  
14 what I am saying to all patent drawings, when you have  
15 sequences --

16 THE WITNESS: May I continue?

17 THE COURT: Yes.

18 BY THE WITNESS:

19 A (Continuing) -- when you have --

20 THE COURT: How do you know that it is a sequence?

21 THE WITNESS: Oh, that's no problem. There are two  
22 ways. One, as the witnesses testified, the verbal descrip-  
23 tion pointed that out, that's what they said.

24 But then also, your Honor, you can see there  
25 are various places in the drawings, for example, right in

1 the middle there is a, like elliptical element 40 which shows  
2 a group of channels or lines, and there are broken lines  
3 there. Now, I don't know what the broken lines specifically  
4 mean here, but that is a typical representation that there  
5 are more lines or may be more lines introduced either in this  
6 embodiment or other embodiments.

7 If you look directly above that also, your  
8 Honor, you see a whole bunch of lines encompassed by ellip-  
9 tical figure 73. Well, those things stop in midair after  
10 some broken lines which, that suggests you are going to have  
11 connections on each of those lines, like the one that's not  
12 broken, you see? And that is a standard technique, the  
13 combination of the verbal description with that drawing is  
14 supposed to tell the whole story. And if it doesn't, it  
15 doesn't. And if it does, it does. But those are standard  
16 techniques.

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Kayton - direct

1 BY MR. KATZ:

2 Q What is the purpose, if you know, of showing one  
3 specific circuit and showing the others in broken or dotted  
4 line?

5 A It has two purposes. One, if you show one and it is  
6 the same as the others, you have shown everything that needs  
7 to be shown in terms of understanding how to make and use the  
8 invention.

9 Secondly, if you show them all, this drawing  
10 might cover the side of the wall, and there have been situa-  
11 tions where you start out with a complex electronic or elec-  
12 trical circuit that is called a bed sheet drawing that  
13 literally covers the wall. That is the engineering drawing,  
14 and then the patent attorney reduces it in this way by having  
15 the repeated circuits represented by broken lines or sometimes  
16 not even put in, just mentioned that they are repeated in the  
17 verbal description.

18 That is a standard patent technique for  
19 bringing into reasonable compass an involved electronic or  
20 electrical or even mechanical system, but at the same time  
21 enabling the person of ordinary skill in the art to under-  
22 stand it, make it, and to use it.

23 Q Mr. Goldenberg --

24 A Oh, just one other thing. Inside "Kayton on Patents,"  
25 there is a whole patent when I was with the General Electric



Kayton - direct

1 Company to an inventor named Bigelow, and if you look at it,  
2 it is in, I think, Chapter 2, and it shows this kind of  
3 electronic lump parameter circuit.

4 I mention that solely so that you will know  
5 I have written those patents.

6 Q Now, Professor Kayton, Mr. Goldenberg in his examination  
7 of Mr. Frederiksen referred Mr. Frederiksen to a so-called  
8 low beta transistor, which Mr. Frederiksen indicated was  
9 described in the specification of the patent but only inferen-  
10 tially disclosed in the drawing of Figure 5.

11 Now, in accordance with established Patent  
12 Office practices, does disclosure in the specification, as  
13 opposed to the drawing; satisfy the disclosure requirements  
14 of the Patent Office?

15 A It certainly does. The whole point of disclosure is that  
16 when you look at the verbal description or the drawings or  
17 both in combination, they must enable a person of ordinary  
18 skill in the art to practice the invention that is claimed.

19 Indeed even the claims, your Honor, the claims  
20 as originally filed, are part of the disclosure, and it is  
21 elemental that that disclosure requirement is satisfied if it  
22 is satisfied by any one, two, or all three of the claims,  
23 the specification, and the drawing.

24 Now, when I teach advanced patent application  
25 preparation and prosecution, I urge my students to make sure

Kayton - direct

that the verbal description in itself describes everything and the drawings themselves describe everything to be overly cautious so as to make sure nothing is left out, but in fact, that is not necessary.

Q In cross examination of Dr. Schoeffler, Mr. Goldenberg showed him a copy of the Bracha and Englehardt patent, which is Defendants' Exhibit 12-B, as in boy, and compared the disclosure of the program of that patent with the disclosure of the program in the Nutting and Frederiksen patent in suit, Plaintiff's Exhibit 3.

Now, Professor Kayton, do you have a copy of the Bracha and Englehardt --

A. No.

1 Q I show you a copy of that patent, Defendant's Exhibit  
2 12-B, and ask you whether, with respect to any issue in this  
3 case, the difference between the form of the disclosures  
4 between these two patents, in respect to the program, matters  
5 in any way in the Patent Office.

6 A It matters not at all.

7 THE COURT: Excuse me --

8 BY MR. KATZ:

9 Q And would you explain why --

10 THE COURT: I've lost the question. What was the  
11 question?

12 MR. KATZ: I asked him to compare the disclosure of  
13 the program listing in the Bracha and Englehardt. In that  
14 one there's flow diagrams and a listing of --

15 THE COURT: I see.

16 MR. KATZ: -- and in Nutting there's just a listing.  
17 And I asked him if it matters in any way in the Patent Office  
18 which way it's disclosed.

19 And then he said it didn't, and I asked him to  
20 explain.

21 BY THE WITNESS:

22 A The answer is that it doesn't matter.

23 Only one thing matters: Can a person of ordi-  
24 nary skill in the art, taking each, practice the invention.

25 And if the answer is yes, then that's adequate.

1 Now, there are many ways to disclose tech-  
2 nological innovation. No two patent attorneys do it the  
3 same way, just as no two people will write about the same  
4 subject the same way.

5 Some people feel exposition is helpful with  
6 flow diagrams; other people feel they are not, and that the  
7 program listing alone is best; others feel both are good.

8 In the final analysis, only one thing matters:  
9 given the verbal description, the drawings, the program in  
10 whatever form, would a person of ordinary skill in the art  
11 know how to make and use the claimed invention.

12 Now, self-evidently the examiner in the re-  
13 issue so held, or he couldn't have issued the patent.

14 And he expressly so held, because at first he  
15 gave Section 112 rejection for non-enablement, which he  
16 withdrew as soon as Mr. Katz pointed out that the program  
17 listing was in fact in the application.

18 Q Could you compare the amount of text, normal English  
19 language text in the Bracha patent with that in the Nutting  
20 patent?

21 A Yes. Bracha has about three pages; Nutting has about  
22 seven pages of text.

23 Bracha has more pages of flow diagrams and  
24 listing; of course, they're very different programs, so you  
25 would assume that, than Frederiksen and Nutting.

1 Bracha also has a couple of more pages of  
2 drawings of circuits than does Nutting, but you will notice,  
3 your Honor, that in Bracha the drawings are spread out far,  
4 far more in the electronic circuits than is done in the  
5 Nutting and Frederiksen.

6 All of these things -- what I'm saying is, all  
7 of these things are absolutely meaningless with respect to  
8 any issue in the case.

9 Q In accordance with established patent practices, is it  
10 necessary to expressly state in the patent specification the  
11 function of each of the elements of the invention or any of  
12 the advantages produced by the invention to satisfy the  
13 disclosure requirements of the Patent Office?

14 A Absolutely not.

15 Q And why is that?

16 A It's very, very simple.

17 The function of the patent is to teach the  
18 world how to make and use something that presumably is of  
19 advantage to society.

20 The reward that is given to the inventor is  
21 not a reward based upon his facility in explaining functions  
22 or advantage. The reward is for his having done something  
23 that's of value.

24 And if the patent encapsulates and captures  
25 technologically that which he contributed in a form so that

1 people of ordinary skill in the art can make and use the in-  
2 vention, he's going to get the reward.

3 There is no penalty for being inarticulate or  
4 for the patent attorney being inarticulate. All that is re-  
5 quired is that the exposition be consistent and understand-  
6 able to a person of ordinary skill in the art.

7 And that is why the patent attorney and his  
8 inventor may be his own lexicographer and even his own gram-  
9 marian.

10 MR. KATZ: Your Honor, that concludes my testimony.  
11 -- the testimony of Professor Kayton, but subject to one item  
12 that we noted, that the -- although Professor Kayton said  
13 that the exhibit 116-1 was the same as 116, except --

14 THE WITNESS: 416.

15 MR. KATZ: -- 416, I'm sorry, 416-1 was the same  
16 as 416-1 -- or, 416 -- Plaintiff's Exhibit 416-1 was the  
17 same as Plaintiff's Exhibit 416, except for the color high-  
18 lighting, we did note that there were some clerical errors  
19 that were corrected in this 416-1.

20 And I would like to -- we'll mark those as  
21 exhibits as soon as we have them here, and we'll introduce  
22 them and give a copy of those pages to the defendant.

23 THE COURT: All right.  
24  
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Kayton - cross

1 THE WITNESS: Well, I would hasten to add what I  
2 testified from, your Honor, was the one that you had and the  
3 one that you saw.

4 MR. KATZ: Which was correct.

5 THE COURT: Mr. Lynch.

6 MR. LYNCH: May it please the Court, your Honor.

7 CROSS EXAMINATION

8 BY MR. LYNCH:

9 Q Mr. Kayton, you testified that your review of the file  
10 history in the reissue application led you to the conclusion  
11 that protester had taken the position that claim 45 included  
12 a matrix. Correct?

13 A Yes, based on the materials that I --

14 Q Is that correct?

15 A Yes, based on the materials I read.

16 Q Now, and you read the entirety of the file?

17 A No, I say based on the materials I read to the Court,  
18 that was what I made that statement based on.

19 Q The first one was at volume 9, tab 63 at page 612,  
20 Plaintiff's Exhibit 1. Would you lay your hands on that?

21 A I think I can. I'd -- just one moment.

22 A Yes. Yes, I have it.

23 Q Now, at page 612, you cited a middle paragraph in which  
24 there was an indication that the examiner recognized in paper  
25 46, said the protesters at page 5, that sequentially and

Kayton - cross

cyclically multiplexed matrix arrangements were known in moving mass arcade games, correct?

A Yes, I quoted that.

Q Then it goes down to talk about just multiplexing in the next column, correct?

A Yes.

Q Now, throughout the time that this reissue application was before the office, claim 45 was always followed by claim 46; isn't that correct?

A I have no recollection.

Q Well, you have the reissue application. Take a look at it, Professor.

A The reissue application?

Q The reissue patent.

A Oh, 46 is physically after 45 in the patent, yes.

Q And was throughout the entire prosecution?

A It may well be, but I have no idea whether it was or not.

Q Do you have any recollection of claim 46 being amended?

A I have no recollection one way or the other.

Q Can you compare claim 46 to originally issued claim 46?

A Yes.

Q Would you do it?

A Sure. Could you show me where it is in the reissue?

Q Claim 46.



Kayton - cross

1 A I assume you are talking about claim 46.

2 Q Yes.

3 A Of the reissue patent.

4 Q It's after claim 45.

5 A And its counterpart.

6 Q It is after claim 45.

7 A Well, there is obviously confusion here. I don't under-  
8 stand what you are talking about, Mr. Lynch. Let me tell you  
9 what my understanding of what you asked me was and see if it  
10 is incorrect.

11 Q No, let me ask you again.

12 A Fine.

13 Q There is a claim 45 in the reissue patent, correct?

14 A Yes.

15 Q It is followed by claim 46?

16 A Yes.

17 Q Was the same claim 46 present in the original patent,  
18 the original patent that issued prior to the reissue applica-  
19 tion?

20 A As, as No. 46?

21 Q Yes.

22 A I have no idea.

23 Q Can you compare them?

24 A Well, I would have to look at -- there was a claim in  
25 the original patent that had to be like claim 46, because

4 Kayton - cross

1 there is nothing bracketed or italicized. But whether it  
2 is numbered any particular number in the original, I cannot  
3 tell you without comparing those claims.

4 Q You don't have a copy of the original patent in front  
5 of you?

6 A I do.

7 Q Well, compare them.

8 A Right here.

9 Q Compare them.

10 A All right, I'd be happy to. I thought you were going  
11 to show me which one it was.

12 The point being, your Honor, that in a  
13 reissue the claim numbers are not necessarily the same.

14 Shall I compare 46 with 46 now?

15 Q Yes.

16 A Yes, they are the same.

17 Q 46 is a claim that calls for a matrix, correct?

18 A Inter alia, yes.

19 Q And claim 46 accompanied claim 45 throughout the prose-  
20 cution of the reissue application, correct?

21 A It was in the case, yes. Is that what you mean?

22 Q And it followed it as claim, one behind claim 45?

23 A Well, I don't know that. It may well have, but I don't  
24 know.

25 Q Referring now back to the argument which you said

Kayton - cross

established that the protesters regarded claim 45 as including a matrix, is any reference made to claim 45 in connection with the argument that you cited at page 612?

A No, not at all. This was a generic statement and, therefore, inferentially includes the broad claims as well as the narrow claims.

1 Q I see. You attribute it to all the claims, is that  
2 correct?

3 A Yes, unless there is something immediately before that  
4 restricts it.

5 Q Let me ask you to refer to PX 414, tab 25, at 288.

6 That was the second instance --

7 A What is PX 4?

8 Q 414.

9 A Oh, PX 414. Is that the black bar?

10 Q I didn't get bars, Mr. Kayton.

11 A Okay, I have 414.

12 Which volume?

13 THE COURT: It is Volume 2.

14 THE WITNESS: 2?

15 BY MR. LYNCH:

16 Q Volume 2, tab 25, at page 288.

17 A What is the Bates number, 288?

18 Q 288.

19 A I have it.

20 Q That was the second instance that you cited where  
21 defendants supposedly attributed a matrix limitation to  
22 Claim 45, correct?

23 A Yes. Let me just check my notes and see if that is  
24 what I do have.

25 Yes, that is correct.

1 Yes, correct.

2 Q Is there any mention of Claim 45 or 46 here?

3 A No, it says the Nutting patent as a whole, and presum-  
4 ably, therefore, comprehends all of the claims.

5 Q It goes on to say:

6 "There is nothing taught about de-bouncing  
7 switches. There is nothing taught about the  
8 manner of solving noise problems or static inter-  
9 ference problems. There is no concern about a  
10 possible failure mode caused by a stuck switch.  
11 Yet these latter items are the items Bally dwells  
12 upon in its arguments."

13 A Right.

14 Q Now, isn't it the case, Professor, that a narrow claim  
15 must be met with the additional limitations that it injects  
16 into the claim if it is to be rejected on the art?

17 A Sure, but the broadest claims included most of those  
18 because they were means plus function claims.

19 Q Professor, it is the case, is it not, that Claim 45  
20 does not use the term "matrix," correct?

21 A No. If you mean in its systemis verbis, yes, it says  
22 means for doing something, and that includes the matrix.

23 The word "matrix" is not in there, but a  
24 matrix is in there as surely as anything is disclosed in  
25 that patent.

1 Q Professor, I would like you to refer to your 413,  
2 Volume 1.

3 A Yes.

4 Q Page 88.

5 Now, at this point you indicated that Bally,  
6 or the applicants, the re-issue applicants, made an argument  
7 that indicated that matrix was inherent in Claim 45, is  
8 that correct?

9 A Wait just one moment so I can see my notes and see in  
10 what context I made reference to that.

11 (Brief interruption)

12 BY THE WITNESS:

13 A Yes, what I said was this statement was made responsive  
14 to the examiner's invitation to the applicants to respond to  
15 the protesters' argument that there was obviousness involved  
16 over a particular piece of prior art, and I have forgotten  
17 what. I think it was Burnside, but I am not sure.

18 BY MR. LYNCH:

19 Q Was the argument that was advanced specific to Claim 45?

20 A All of the claims that were listed as being obvious by  
21 the protesters included, as I expressly told the Court,  
22 claims 45 and 95.

23 Q And 46 also, correct, in the same context?

24 A Very likely.

25 Q Page 119 of the same book, please.

1 A Sure. Yes, I have it.

2 Q Is there any indication in this argument advanced by  
3 Bally that their response is specific to Claim 45?

4 A This entire paper is responsive to all of those claims  
5 and includes Claim 45.

6 Q Do you need the question again, Mr. Kayton?

7 A Well, the answer is --

8 Q Is there anything that indicates that the argument here--

9 A Yes.

10 Q -- made at 119 is specific to Claim 45 and excludes  
11 Claim 46?

12 A And excludes Claim 46?

13 Q Yes.

14 A I see nothing that excludes Claim 46.

15 Q Now I would like you to refer to 413, Volume 3.

16 A But it clearly doesn't exclude Claim 45.

17 Q 413, Volume 3, Mr. Kayton.

18 A Mr. Lynch, I am very happy to go there.

19 Is it inappropriate for me to complete the  
20 answer?

21 THE COURT: I think you already have, haven't you?

22 THE WITNESS: Well, no, I thought there was one  
23 more point, but I will proceed on if that was inappropriate.

24 THE COURT: Well, if you have something to add, go  
25 ahead.

1 THE WITNESS: Well, I have added it.

2 But I would like to say again, just as there  
3 is no specific indication that it's specific to 46, there is  
4 no specific indication that it's specific to 45, but at the  
5 beginning of the discussion it is made clear that the  
6 arguments are applicable to all of those claims.

7 Right at the front of that paper that has  
8 that argument, responsive to the examiner's rejection.

9 Now, I didn't catch the next volume.

10 BY MR. LYNCH:

11 Q 119, same volume -- I'm sorry. Volume 3, 698.

12 A Volume 3 of Exhibit 413.

13 Yes, I have it.

14 Q Now, there is an argument that commences on that page  
15 that says, "Thus, considering amended patent claim 1..."

16 A Yes.

17 Q Do you remember what patent claim 1 had in it during the  
18 reissue proceedings?

19 A No.

20 Q Do you remember if claim 1 was one of the claims that  
21 never recited the word "matrix"?

22 A Well, shall I look at the claim and refresh my recollec-  
23 tion.

24 Q You can look at the claim, yes.

25 MR. LYNCH: Can I make a copy of this available to



Kayton - cross

1 your Honor?

2 THE COURT: Well, which one is that?

3 MR. LYNCH: I'm at 413, your Honor, volume 3.

4 THE COURT: I've got it up here.

5 MR. LYNCH: I don't know what bar that is, your  
6 Honor. I don't know what the color code is on it.

7 It appears to be 3 blue stripes, your Honor.

8 THE COURT: Yes, I have it. And what page?

9 MR. LYNCH: Bates No. 698, if it please the Court.

10 BY MR. LYNCH:

11 Q Now, by refreshing your recollection with the patent,  
12 the reissue patent, can you tell me whether claim 1 of that  
13 reissue patent or claim 1 of the original patent uses the  
14 specific word "matrix"?

15 A The word "matrix" is not in that claim as a word; it is  
16 in there however as a technical element based upon the  
17 testimony of Dr. Schoeffler and the specification.

18 Q I understand.

19 A All right.  
20 In fact, if we understand that, I won't say  
21 it again.

22 Q If we progress from the first paragraph beginning on  
23 698, we find that it says: "Thus, considering amended patent  
24 claim 1": That is the claim that does not include the speci-  
25 fic word "matrix." Correct?

1 A Yes.

2 Q It goes on and quotes the claim, and in that quoted  
3 portion of the claim the word "matrix" does not appear.

4 Correct?

5 A Yes.

6 Q As we go on, we are continuing to distinguish it, and it  
7 says, "Referring particularly to the underscored language in  
8 Burnside" --

9 A I don't know where you are.

10 Q Below the quoted material.

11 A Ah-ha. Okay.

12 Q And the argument is being advanced, is it not,  
13 Mr. Kayton, of the patentability of claim 1 as amended over  
14 Burnside?

15 A May I read it?

16 Q Yes.

17 A (Witness reading document.)

18 of the claim the Yes.

19 Q Now, as we go down, we can turn the page, we come to  
20 the next page, the argument continues.

21 I'd like you to go to the second full para-  
22 graph on page 699.

23 A Yes.

24 Q At that point it says, "Burnside also does not disclose  
25 other features of the other pending claims." Correct?

A I don't know where you are.

Q I am in the second full paragraph. It begins with the word --

A The second full paragraph, yes. Okay.

Yes.

Q "For example, although the switches and lamps of Burnside are each physically positioned in a matrix, as discussed above, they clearly are not electrically connected in a matrix as that term is used in other pending claims."

To what does that refer?

A That refers to claim 46, I'm sure.

But you overlooked a critical paragraph, Mr. Lynch. You skipped the bottom of page 35 and the top of 36. And that talks about the multiplexing means connected to signal the processor.

And that presumably is the multiplexing means of the claim that we're talking about.

And multiplexing means needn't say multiplexing; it just could say means, a means, that means, first means.

That means is a matrix multiplexing means, and therefore this discussion deals with that in relationship to distinguishing from Burnside on that basis.

What's talked about in the successive place

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Kayton - cross

1 is another aspect of the matrix, in exactly the way that  
2 Dr. Schoeffler testified.

3 This isn't mine. This is what Dr. Schoeffler  
4 said. I'm just pointing out where these very things are  
5 acquired by the claims in exactly the way Dr. Schoeffler said.

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1 Q I am just pointing out where the differentiation was  
2 made between claims that contain the word "matrix" and those  
3 that did not.

4 Turn, please, if you will, Professor --

5 A Well, that's not the distinction made.

6 Q -- to 744 --

7 A Pardon?

8 Q You mean there is no distinction between a claim that  
9 uses the specific term "matrix" and a claim that does not  
10 on pages 698 and 699?

11 A Yes, because 46 distinguishes not by matrix, but by the  
12 way the matrix is hooked to the switches and the lamps, as  
13 Dr. Schoeffler must have testified to ten times.

14 The fact is, both claims require a matrix.  
15 46 requires that the switches and lamps be hooked in a  
16 plurality of sets to the one matrix. I know this simply be-  
17 cause I have heard Dr. Schoeffler so testify.

18 Q I understand. I just want to talk about what is written  
19 here and we can worry about that later.

20 Turn, please--

21 A Well, that's what I am doing.

22 Q -- to 744 of the same volume.

23 A Yes.

24 Q Now, here again there are additional arguments being  
25 advanced in another paper against or over the rejection of

1 the claims on Burnside, correct?

2 A I have to look at that; I have not seen this.

3 Q Well, take a look at this.

4 A Yes, the top, it says, "...distinguished them from  
5 Burnside," and I have not read down. I will await the  
6 question.

7 Q Now, it again underlines that multiplexing means  
8 language, correct, and the argument continues on 745?

9 A Are you saying the claim underlines it?

10 Q It is underlined in the claim and the argument continues  
11 on the following page.

12 A I would like to look at that claim.

13 (Brief pause)

14 BY THE WITNESS:

15 A Yes.

16 BY MR. LYNCH:

17 Q Now, if you turn to page 746 --

18 A Well, I don't know what I am supposed to look at on 745.

19 Q Well, in the continuing argument there, is the distinc-  
20 tion made or the argument made that Claim 1 involves a matrix?

21 A Of course not. That argument is directed to an entirely  
22 different issue.

23 Q Turn to page 746.

24 A I am not finished.

25 -- to an entirely different issue, by pointing

1 out that what we are talking about here is the apparatus  
2 would have to be able to determine the state of each of the  
3 switches separately, which Burnside certainly couldn't do,  
4 and you are talking about apples and oranges. There are  
5 dozens of things in that claim, and in prosecuting this  
6 claim application, the attorney does whatever the attorney  
7 does. He discusses each of the issues. He is not obliged  
8 in every sentence to say, "There is a matrix in this thing,  
9 and also" -- "there is a matrix in this thing and also,"  
10 and therefore, my answer to your question is, it is irrele-  
11 vant, the issue of using the word "matrix" in that sentence.

12 Q He says at page 745: "Obviously 'cyclically and sequentially en-  
13 abling each of the signaling means to signal the  
14 processor that its associated response means have  
15 detected the masses' means that the apparatus must  
16 be able to determine state of each of the switches  
17 separately." Correct?

18 A Correct.

19 Q Can one do that in a matrix?

20 A I have no idea, technically. All I can tell you about  
21 is what the claim says. It says, "Multiplexing means..."  
22 and that means is a matrix multiplexing means, "for cyclical-  
23 ly and sequentially enabling," that's what the claim says.

24 And to the extent that that function is asso-  
25 ciated with that means, the means that carries out that  
function is the matrix multiplexing means.

means 1 Q Turn to page 746.

2 A I have it.

3 Q The first full paragraph of the text below the quote  
4 indicates, "The language with which the protesters are  
5 referring to with relationship to the term 'matrix' is con-  
6 tained, for example, in claim 2 which reads," and then there  
7 is an underlined portion of claim 2 where the word "matrix",  
8 among others, is an underlined portion of claim 2 where the  
9 word "matrix," among others, is underlined. Correct?

10 A Yes.

11 Q So there was a distinction at this point made to the  
12 fact that the word "matrix" appeared in claim 2 and not in  
13 claim 1. Correct?

14 A Absolutely not. Dr. Schoeffler made that as clear as  
15 anything can be. The matrix is in claim 1, it is in claim 2,  
16 and he is talking about the plurality of sets of elements.

17 Now, I have not been allowed to talk about how  
18 you construe claims. But this is the classic example of  
19 claim differentiation. This is the classic indication that  
20 claim 2 distinguishes from claim 1 not in the matrix, but in  
21 the way things are hooked up to the matrix.

22 Now, I feel really put upon --

23 THE COURT: I think, Mr. Kayton, that you are  
24 talking about something different than Mr. Lynch is talking  
25 about. You are talking about your view of how the claims



Kayton - cross

ought to be construed and your view of plaintiff's case. He is talking about your earlier testimony attributing to the defendants essential agreement with your views.

Now, this question goes to whether or not the defendants in their argument in the Patent Office were distinguishable -- no?

MR. LYNCH: I think it is fair to say, your Honor, the last two you have looked at have been arguments by the plaintiffs. The last two have been arguments by the plaintiffs. The first two were arguments by the defendants that Mr. --

THE COURT: What's in here?

MR. LYNCH: That's an argument by Bally and the general point was that it was not universally accepted throughout the reissue proceedings that there was matrix in claim 1. I think that there are words there that can be read to the contrary of Mr. Kayton's testimony.

THE COURT: All right, I withdraw what I said. I thought this was something the defendants were saying.

THE WITNESS: Thank you, your Honor.

This is the very heart of the matter.

Claim 2 talks about how things are hooked to the matrix.

In claim 1 there was no need to mention the matrix, because there was no discussion about how things are hooked to it. When you got to claim 2 --

3

Kayton - cross

1 THE COURT: I have all that from Dr. Schoeffler's  
2 testimony.

3 THE WITNESS: Okay.

4 THE COURT: I am either going to accept it or not  
5 on the basis of what I've heard already.

6 THE WITNESS: Well, your Honor, I felt impelled to  
7 respond accurately to his question, and I think I now have.

8 THE COURT: I think that I will withdraw the  
9 privilege I had extended to you so far to editorialize in  
10 answering questions. Please answer the questions directly  
11 and let Mr. Katz come back on redirect examination, at which  
12 time you will have ample opportunity to add anything you want  
13 to add.

14 THE WITNESS: Yes, your Honor.

15 THE COURT: Otherwise, we will be here for the rest  
16 of the week on your cross examination.

17 THE WITNESS: Yes, sir.

18 BY MR. LYNCH:

19 Q You testified about the Bracha patent, correct?

20 A Yes.

21 Q And I believe you testified that the fact that the  
22 Bracha patent may be used in the commercial games at Bally is  
23 immaterial to the commercial success considerations involving  
24 the '441 patent, correct?

25 A No.

1 Q Well, you testified that the examiner would not have  
2 understood and attributed the commercial success to the  
3 Nutting invention, correct?

4 A Would you repeat that?

5 Q You testified with respect to the Bracha patent --  
6 well, let's go back to the Stern license.

7 You testified about the Stern license, Plain-  
8 tiff's Exhibit 76?

9 A Yes.

10 Q Said this was a license under only one issued patent,  
11 correct?

12 A Yes.

13 Q You are aware that the testimony confirms that it was  
14 also a license under the patent application that was pending  
15 that eventually issued as the Bracha patent, correct?

16 A Yes.

17 Q It is common, is it not, to have licenses under patent  
18 applications, is it not?

19 A Yes, but no royalties can be paid on it.

20 Q No royalties can be paid under application?

21 A Unissued applications, right.

22 Q Are you suggesting that it is illegal or somehow against  
23 the law to pay a royalty under a pending patent application?

24 A Unless you are paying for an option or a trade secret,  
25 I am suggesting that that is the case.

Kayton - cross

1 Q The Bracha patent eventually did issue, correct?

2 A Yes.

3 Q I would like to ask you did you review the file history  
4 of the Bracha patent?

5 A I did at one time.

6 Q At page 11 of an amendment filed in the Bracha applica-  
7 tion, entitled "Amendment F," at that point--

8 A I can't find it.

9 Q -- an argument was made:

10 "Although the Nutting, et al patent, which was  
11 considered to be the most pertinent reference,  
12 teaches the general concept of employing a multi-  
13 plexing system in a pinball machine, the particular  
14 use of the separate controlled circuit in the  
15 present application--" that is the Bracha appli-  
16 cation -- "provides certain advantages over the specific  
17 embodiment disclosed in the Nutting, et al patent.  
18 These advantages include the reduction in radio  
19 frequency interference in the lamp portion of the  
20 system when direct drive is used, providing lower  
21 peak currents for greater economy in repair and  
22 simpler trouble-shooting due to the separation of  
23 indicator and switch portions of the system from  
24 the computer portion."

25 Now, Professor Kayton, you can verify, can

1 you not, those comments were made by a representative of  
2 Bally on behalf of Bally in the Bracha application?

3 A Yes.

4 Q Those comments, assuming the truth of them, that it  
5 offers advantages, does that not indicate that part of the  
6 success of the Bally machine is attributable to the develop-  
7 ment of Bracha?

8 A I would imagine so. I would be surprised if that was  
9 not the case.

10 Q You did indicate that you didn't think anyone could pay  
11 any money under a patent application unless they had something  
12 in addition to the patent application, like a trade secret  
13 or something like that, correct?

14 A Unless there was some consideration --

15 Q Have you ever --

16 A --know-how, trade secrets.

17 Q Have you ever seen Exhibit 12-DD, Professor?

18 A Yes.

19 Q You have?

20 A I have seen -- well, maybe I haven't.

21 Q No, I haven't.

22 Q It is --

23 A I thought this was the Stern license, but it is not.

24 Q No, it is a letter circulated by Stern that suggests  
25 that all the parts in the Stern machine are absolutely  
interchangeable with all the parts in the Bally machine.

A. Yes.

-1b1

Kayton - cross

1 Q Would an arrangement that permitted a company to do  
2 that support such a royalty?

3 A Would an arrangement --

4 Q Would an arrangement, a contract that permits a party  
5 to make interchangeable parts with another party's device,  
6 would that support a royalty?

7 A Depends on the contract. I'd have to read the contract.

8 Q But it would support a royalty, that is, for that  
9 privilege, correct?

10 A I have no idea. You would have to show me the con-  
11 ditions of the arrangement.

12 Just as I can't construe a statute without  
13 the statue, I can't construe a contract without the contract.

14 Q Did you review the Stern license, Professor Kayton?

15 A I looked at the Stern license and read it.

16 Q Assuming the truth of what is said in 12 DD, that is,  
17 that Stern made interchangeable parts with Bally, under those  
18 circumstances is it not reasonable to assume that part of the  
19 royalty in the Stern license is attributable to that arrange-  
20 ment?

21 A I can't deduce that from that. This is a contract be-  
22 tween Stern and Bally that you're talking about.

23 I don't understand what interchangeability  
24 of parts that are not proprietary or anything else has to do  
25 with it.

2 Kayton - cross

1 If you explain it to me, I'll understand it.

2 Q Let me suggest --

3 A You are, however, talking about an area of which I have  
4 no knowledge at all.

5 Q Let me suggest to you, Dr. Kayton, that it says here  
6 that also "Bally test equipment, including the AID-1 and AID-  
7 2, which many operators have purchased, and Bally board test  
8 fixtures, which many distributors have purchahsed, work on  
9 Stern games."

10 It goes on to indicate --

11 A This is 12 DD that you're talking about?

12 Q Yes.

13 A Oh. Fine. Then I'd like to follow it with you. Where  
14 are you?

15 Q The arrangements provided here, in your experience,  
16 do such arrangements support royalties in agreements between  
17 industrial parties?

18 A You have to show me what you're talking about.

19 This is a letter to the distributors. Now,  
20 what am I supposed to know about it?

21 Q Let me ask you this: When you considered the issue of  
22 the effect and import of the agreement, Plaintiff's Exhibit  
23 76, on establishing commercial success, did you consider the  
24 fact that Stern, in obtaining this agreement, obtained rights  
25 analogous to those set forth on 12 DD?

Kayton - cross

1 A May I read 12 DD?

2 I have no idea what 12 DD says. (Witness  
3 reading document.)

4 I don't see that this says they acquired any  
5 rights. It sounds like they're saying: Look, Bally is a  
6 good company. We make parts like theirs, and if you buy our  
7 machines, you could use Bally parts.

8 That's all I can read from --

9 Q I'm asking you to assume that those rights were  
10 acquired: Would they, in your experience, support a royalty?

11 A What rights were acquired?

12 Q The rights set forth in 12 DD.

13 A There are no rights set forth in there, that I can see.

14 Show me the rights, and I'll respond.

15 Do I misunderstand what this letter says,  
16 Mr. Lynch?

17 Q Professor Kayton, I'll go on to something else.

18 There was a 131 affidavit filed in the Bracha  
19 case, correct?

20 A Yes.

21

22

23

24

25



1 Q It establishes that the Bracha invention was reduced to  
2 practice, or so there was an affidavit filed, on May 10, 1975.

3 A I can't hear you.

4 Q The Bracha invention was allegedly reduced to practice  
5 on May 10, 1975. Correct?

6 A I think it says before May 10, '75.

7 Q Before May 10, '75.

8 A Yes.

9 Q Now, May 10, 1975 was before the filing of the Nutting,  
10 the original Nutting patent application, correct?

11 A I believe that's correct, but I don't know for sure.

12 Q It was filed on May 13.

13 A Okay.

14 Q Now, it is the case, is it not, that the subject matter  
15 of the Bracha patent is or corresponds to the claims in the  
16 Nutting patent, correct?

17 A I am not prepared to say that. I have no basis for know-  
18 ing the relative claim relationships of the inventions.

19 I know nothing about the Bracha technology at  
20 all.

21 Q Do you know whether a reduction to practice of the  
22 Boomerang machine which occurred on May 10, 1975 -- May 2nd,  
23 or prior to May 10, 1975, whether that device indeed was  
24 within the scope of the issued claims of the Nutting patent?  
25 A I have no idea.

1 Q Well, you do know that the Boomerang device was the  
2 basis for the Bally commercial games, do you not?

3 A Boomerang was a prototype, if I recollect, of the  
4 commercial device, yes.

5 Q And it was the prototype of the Bally commercial games,  
6 correct?

7 A I think that was-- that Boomerang was submitted here in  
8 the Rule 131 affidavit, yes.

9 Q That's correct.

10 Now, it was the prototype for Bally commer-  
11 cial games, correct?

12 A I understand that to be the case.

13 Q And if indeed the commercial success that was introduced  
14 in the Patent Office about the Bally commercial games is  
15 attributable in any fashion to the Nutting patent, the  
16 Nutting patent would have to cover that, correct?

17 A No, I don't know that to be the case at all. They may  
18 cover--

19 Q It would have to cover the commercial games?

20 A They may cover entirely different parts of the game. I  
21 don't know.

22 You have a big system. I'm not in a position  
23 to say.

24 Boomerang may have something that certain  
25 claims cover, and Nutting and Frederiksen that may cover

Kayton - cross

1 other parts of it. I'm not in a position to respond.

2 Q Dr. Kayton, you testified that the Patent Office con-  
3 sidered the success of the commercial Bally games --

4 A Yes.

5 Q -- as relevant to the patentability of the Nutting  
6 patent, correct?

7 A Yes.

8 Q That would mean, for that to be a valid consideration,  
9 the commercial Bally games would have to be within the scope  
10 of the claims of the Nutting patent?

11 A The claims would have to comprehend part of that system,  
12 yes. That's necessarily the case.

13 Q But the relationship between the Bracha invention  
14 and the Bally invention, only the examiner and you know.

15 I don't.

16 Q Now, you testified that the examiner

17 considered the success of the commercial Bally games

18 as relevant to the patentability of the Nutting

19 patent, correct?

20 A Yes.

21 Q Now, you testified that the examiner

22 considered the success of the commercial Bally games

23 as relevant to the patentability of the Nutting

24 patent, correct?

25 A Yes.

b1

Kayton - cross

1 Q Let me ask you this: Do you know whether the Boomerang  
2 or any other specific game was in fact within the scope of the  
3 Nutting patent? Any other Bally game, Boomerang, Bow and  
4 Arrow, any of them?

5 A My understanding is that Freedom and Night Rider were  
6 submitted in the reissue as demonstrations of commercial  
7 success of the Frederiksen and Nutting patents, yes, that's  
8 my understanding.

9 Q But you have, so you have no understanding as to whether  
10 the prototype for the Bally games as embodied in Boomerang  
11 was comprehended, as you put it, by the claims of the Nutting  
12 patent?

13 A Well, there are two things. One, I do not know that.  
14 And I also do not know what the distinction between the  
15 Nutting claims and the Bracha claims are in relationship to  
16 the system. It is entirely possible that they don't compre-  
17 hend each other. All I testified to was that the examiner  
18 did know, he knew all of the things you are talking about.

19 Q Assuming that the Boomerang game is within the scope  
20 of the Nutting patent, the affidavits you have before you  
21 establish, according to Bally's own admission, that it was  
22 reduced to practice prior to the filing date of the Nutting  
23 patent, correct?

24 A That's what it says.

25 Q Now I'd like you to refer to your exhibit 413 at tab G-

Kayton - cross

1 I'm sorry, 415, 415.

2           You testified, I believe, that the examiner's  
3 role in the office was to consider the art and to reject the  
4 claims or to make sure that they met the statutory criteria,  
5 correct?

6 A       I said more than that, but he does that, yes.

7 Q       Now, at page 13 of this portion of file history, the  
8 examiner asks, " --

9 A       May I get to it?

10 Q       Yes.

11           MR. LYNCH: It is Bates No. 77, your Honor. I am  
12 operating on an entirely different system.

13           THE COURT: I have it.

14           THE WITNESS: I have it.

15 BY MR. LYNCH:

16 Q       It says here, "The examiner is asking the question,  
17 'Just what was it that reissue applicants did that others  
18 attempting to practice in this discipline were allegedly  
19 incapable of accomplishing?' It goes on to indicate upon  
20 reevaluation of the pertinent facts concluding the disclosure  
21 of 232, the examiner has noted that the record is not very  
22 clear as to the problem to be encountered by those ordinarily  
23 skilled in the surface projectile or pinball art. Whether  
24 such problems were long-standing, were insurmountable --"  
25 A       You've got to direct me, Mr. Lynch. I don't know where

Kayton - cross

1 you are.

2 Q I am reading. Did you see where I was just --

3 A I saw where you started.

4 Q I am reading directly down from this.

5 A Are you in the middle of the page now?

6 Q Yes.

7 A "Whether such problems"?

8 Q " -- were long-standing, were insurmountable or would  
9 have required undue burden or experimentation to resolve,  
10 did reissue applicant's contribution actually overcome these  
11 problems? And what were the problems encountered in an  
12 integrating discrete pinball version into a self-contained  
13 unit, and would these problems have been merely routine to  
14 those practiced in the art?"

15 Now, those questions were asked by the  
16 examiner, correct?

17 A Yes.

18 Q He was asking a subjective question, was he not?

19 Just what happened, correct?

20 A It sounds objective to me.

21 Q All right. Now, it is a fact, do you recall what  
22 answer was given in response to those questions?

23 A Ultimately?

24 Q Yes. The answer given to Bally to those questions --  
25 the answer given by Bally to those questions.

Kayton - cross

1 A. I now understand the question, and I don't recollect  
2 off the top of my head the answers.

3 Q Do you recall if the answer to that question, Bally  
4 indicated anything about its software, the software aspects  
5 of its invention?

6 A. I have no recollection.

7 Q You have no recollection at all?

8 A. No.

9 Q Can you get 413, PX-413, at tab 12, Bates No. 316?

10 A. Yes.

11 MR. LYNCH: Your Honor, it is volume 1 of 413.

12 THE COURT: I've got it.

13 MR. LYNCH: I don't have stripes on it.

14 THE COURT: What's the Bates page?

15 MR. LYNCH: It is 316, your Honor.

16 BY MR. LYNCH:

17 Q At this point, this is Bally's response, is it not, to  
18 those very questions?

19 A. I don't know.

20

21

22

23

24

25

1-1b1

Kayton - cross

1 Q Can you detect from right here -- it is a Bally paper  
2 we are in the middle of. We are in the Bally exhibit.

3 A The title says, "The questions raised by the examiner  
4 are answered by the record in this case."

5 If this refers to those questions, then that  
6 does it.

7 Q Come down with me, Professor Kayton, to the second full  
8 paragraph.

9 First the examiner has asked:

10 "Just what was it that reissue applicants did,"  
11 et cetera.

12 A Yes.

13 Q Now, the answer that is provided there does not refer to  
14 a combination of hardware and software, does it?

15 A It is a short sentence, and those words sure do not  
16 appear there.

17 Q Second, if we go down to the next paragraph:

18 "The examiner queried whether there were  
19 problems encountered by those ordinarily skilled  
20 in the surface projectile or pinball art and  
21 whether they were long-standing or insurmountable  
22 or would have required undue burden or experimenta-  
23 tion to resolve."

24 Now, in response to that, what specific  
25 problems did Bally outline?



Kayton - cross

1 A Should I read that?

2 Q What specific problems did Bally outline in response to  
3 that question?

4 THE COURT: Read it to yourself and then answer  
5 the question.

6 THE WITNESS: Oh, I see.

7 (Brief interruption.)

8 BY THE WITNESS:

9 A I suppose the noise problems because it refers to the  
10 Atari and Ramtek activities, which failed because of noise  
11 problems.

12 BY MR. LYNCH:

13 Q Specifically what problems are mentioned there?

14 A They said that there were such problems and that they  
15 couldn't be cured by experts such as Atari and Ramtek. They  
16 didn't outline specific ones.

17 Q Fine. Are you satisfied they didn't outline any  
18 specific problems in response to that query?

19 A That is what I said.

20 Q Fine. Go to page 318.

21 A Yes.

22 Q Near the bottom of the page, the paragraph begins:  
23 "Third, the examiner posed the question did  
24 reissue applicants' contribution actually overcome  
25 these problems?"

Kayton - cross

Q What was specifically outlined that the reissue applicants accomplished by way of the combination of hardware and software to solve those problems?

A I pointed out no problems were outlined, just that they existed, and in this paragraph there were no problems to respond to, therefore, other than to say that the problems that did exist were solved, and that is what they said, and each one of those is a sentence or two.

Q Continuing on to Bates 319, the fourth question is addressed.

A Yes.

Q "Fourth, the examiner queried the problems encountered in integrating the discrete pinball unit to a self-contained unit and asked whether these problems would have been merely routine to those practiced in the art."

Q What specifically was the examiner told about the nature and scope of this invention in response to that query?

A Static noise, heat --

Q Static noise and heat, correct?

A I haven't finished. I am going on. I am trying to respond narrowly to your questions now.

(Brief interruption.)

BY THE WITNESS:

4

Kayton - cross

1 A Problems not ordinarily encountered with solid state  
2 circuits, primarily energization of solenoids and high current  
3 pulses which they drew. They were afraid of induction between  
4 high power current lines and sensitive switches or signal  
5 lines. They are also concerned about the size of transformers  
6 and the fields -- I assume that means electromagnetic fields--  
7 producing noise inductants.

8 But whatever these problems were, the  
9 significant point is that they could be solved.

10 BY MR. LYNCH:

11 Q There is no discussion there of the fact that or how  
12 the software of the '441 patent solved those problems, is  
13 there?

14 A No, I thought we were talking about the problems.

15 Q Is there any discussion about the combination of hard-  
16 ware and software working together anywhere in response to  
17 the examiner's queries?

18 A I didn't see it.

19 Q Any mention there about the specific or specific noise  
20 prevention or noise immunity techniques?

21 A I didn't see that.

22 Q Any mention at all about recovery from a stuck switch?

23 A I didn't read that.

24 Q If you go to PX 4 -- let's take the matter of the software  
25 and the role it played in the considerations of the examiner.

5

Kayton - cross

1 Did the examiner specifically indicate anywhere,  
2 to your recollection, in the file history that he understood  
3 that the software provided noise immunity and noise preven-  
4 tion techniques?

5 A I sure would be surprised if he did, and I have no  
6 recollection other than for him to say that that software was  
7 essential to support the claims that define the invention.

8 Q We will get to that later. Let me ask you to refer to  
9 PX 415, tab J, at 94.

10 A Yes.

T12

11  
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25

1 Q Bates number 94.

2 A Mm-hmm.

3 Q Now, at this point, in the middle of the page, the  
4 middle of that long paragraph, there's a paragraph that  
5 begins "Furthermore".

6 A I see it.

7 Q At that point can you tell from this page whether the  
8 examiner was formulating a rejection of the claims at this  
9 time?

10 A I don't know the context of this, but at the bottom of  
11 the page he seems to say that the claims are patentable:

12 "Thus, from the evidence of record, it would  
13 appear that the disclosed subject matter surround-  
14 ing conception of the multiplex microprocessor  
15 controlled pinball machine covering the features  
16 of most of the broadly-defined claims, for example,  
17 Claim 60, 63, 70, 72, 79, 83, 97, is sufficient,  
18 absent concrete evidence to the contrary."

19 Q Now, but above that there's an indication in that con-  
20 text that "the software generation for game implementation  
21 would have only demanded routine skills as evidenced by Cox'  
22 work on the Cyan El Toro machine."

23 Correct?

24 A Oh, yes. He completely rejected that later, however.  
25 No question about that.

1 Q He rejected that statement about the software of the  
2 Flicker game?

3 A Oh. Is this about Flicker? I thought this was Cox'  
4 work on the Cyan El Toro.

5 "Furthermore, the software generation for game  
6 implementation would have only demanded ..."

7 Oh, I see what you're saying.

8 Sure. At that time what he was saying was  
9 that it seemed to him at that time that the software was not  
10 an important consideration because Cox' work involved rou-  
11 tine skills.

12 But of course, thereafter he pointed out very,  
13 very clearly exactly the opposite, because El Toro failed  
14 to work, the Delta Queen failed to work, and Cox could not  
15 make the software work to eliminate the noise problem.

16 And it was on that basis indeed that he allowed  
17 the claims.

18 That proposition was completely rejected by  
19 him later on when it was so established that there were no  
20 operative machines.

21 Q Professor, are you familiar with this exhibit, 469,  
22 introduced by plaintiff?

23 A I've seen it, but I'm not familiar with it.

24 Q Are you familiar with these terms that Dr. Schoeffler  
25 put in the "Combination of noise preventive and immunity

1 techniques" column?

2 A I remember his testifying to those terms and I remember  
3 he said certain machines had them.

4 MR. KATZ: I would like to object to this as being  
5 beyond the scope of direct, if he's going to go into the  
6 infringement area, which we didn't go into.

7 MR. LYNCH: I'm not, your Honor.

8 THE COURT: All right, go ahead.

9 BY MR. LYNCH:

10 Q Do you know if anywhere in the file history it was argued  
11 by Bally that the Flicker machine had self-cleaning digits?

12 A No, nor would I know, because I don't know what those  
13 terms involve technically.

14 I don't know what they do and what the struc-  
15 ture is that's required to do them.

16 Q Do you know if the term "self-cleaning lamps" was  
17 argued to be a basis for patentability?

18 A I'm not in a position to respond.

19 Q You're not in a position to respond about any of these?

20 A No.

21 Q Do you know if there was an argument about -- let's  
22 take "boards in the back box".

23 Claim 45, was there ever an argument that Claim  
24 45 had the -- the invention of Claim 45 had this advantage of  
25 boards in the back box?

1 A Well, I know what a board in the back box means, and I  
2 have no recollection of a discussion about boards in the  
3 back box.

4 Q Now, indeed -- how about any of these others, "interlock"  
5 or "double reading switches"? Were any of these items argued  
6 to be the basis of patentability?

7 A I can't say because I don't know what many of them are.  
8 And I would not be prepared to say whether a particular sen-  
9 tence or paragraph or page dealt with that, in that these are  
10 shorthand statements, and I'm not prepared to say.

11 What I know is that Dr. Schoeffler testified  
12 that all of those things are disclosed in the patent, and  
13 the claims require at least some of them, is my best recol-  
14 lection.

15 Q I'd like you to refer now-- what about "cold lamp current  
16 limiting"? No recollection?

17 A Of what?

18 Q Whether that was argued as a basis for patentability?

19 A I have no recollection.

20 Q Do you have a recollection from Dr. Schoeffler's testi-  
21 mony if that is a feature that results from the use of the  
22 low beta transistor?

23 A Seems to me he said there were two things that could do  
24 that, and maybe one was the low beta transistor. But I don't  
25 know for sure.



1 Q Refer to Claim 29.

2 A Of the patent?

3 Q Yes.

4 A That indicates that low beta transistor affects this  
5 cold -- this limitation of current to the lamps, correct?

6 A I can't say absolutely from a technical point of view.

7 It seems that way. But I don't know for sure.

8 Q Refer to PX413, please, at tab A.

9 A Just one moment, please.

10 Q Yes -- 413 at tab A?

11 Q Yes. 413 at tab A.

12 A 415? Last line?

13 Q 413.

14 A There is no such thing.

15 Q Plaintiff's Exhibit 413 -- oh -- 415. I'm sorry.

16 A I mean, I prepared these exhibits. I'm telling you  
17 there's no such thing.

18 Q I'm sorry. At tab A of 415.

19 A Okay.

20 Q Yes.

21 Is it fair to say, if it were a collection, did the  
22 examiner find any patentable aspect to the cold is a current  
23 limiting device when it was considered independently, anywhere  
24 in the prior history?

25 A Maybe I better ask, be sure I understand the question.

Kayton - cross

1 Q At page 12 and 13, what did the examiner find about the  
2 low beta transistor? I refer you to three lines from the  
3 bottom, or the last line, I'm sorry.

4 A On page 12?

5 Q Last line on Bates 12 going over to Bates 13.

6 A I read it.

7 Q Do you know if that's referring to the low beta transis-  
8 tors?

9 A No, I don't know if he testified that that was the case.

10 Q Let me ask you to refer in the same volume to tab E,  
11 4849, Bates 4849, tab E.

12 A Yes. Last line?

13 Q Last paragraph, yes. "Reissue applicants mentioned  
14 with respect to a specific claim," that claim 59, "that  
15 the distinguishing factor of that claim rests on the low  
16 beta transistor lamp driver to which examiner does not concur."

17 A Yes, what about it?

18 Q Goes on to indicate that the schematic, et cetera, have  
19 disclosed transistorized lamp drivers of the type claimed.

20 A Yes.

21 Q Is it fair to say, is it your recollection, did the  
22 examiner find any patentable aspect in the cold lamp current  
23 limiting aspect when it was addressed independently anywhere  
24 in the file history?

25 A Maybe I better ask, be sure I understand the question.

Kayton - cross

Are you asking me whether he ever said that any one of those independently provides patentability? If that's the question, no, no, never, with respect to any one of them. And that would be incredible.

Q There are claims specifically addressing that aspect; in the discussion of that specific aspect, cold lamp current limiting, do you know if the examiner ever attributed any novelty or unobviousness to the incorporation of that feature in a pinball game?

A Your question can't even be answered, because unobviousness is never attributable to one element of a claim combination. That's a meaningless statement. He certainly did not do that, and it can't be done.

Q There were claims, you recognize, that relate to cold lamp current limiting, right?

A You showed me a claim, a dependent claim, which includes a whole bunch of other elements as a combination.

Q Was this aspect of the claim ever given a treatment other than it was obvious to one of basic electronics background; that is, was the cold lamp current limiting aspect of the claim ever given a treatment by the examiner other than it was an obvious thing for someone with basic electronics background?

A I have no knowledge that that was ever done, nor could I ever believe that it would be done.

Kayton - cross

Q Page 71 at tab G of the same exhibit, first full paragraph says, "With respect to claims 28 and 58, page 3-13 of the Fairchild manual would have suggested the prospect of driving clamps with low beta cascaded to and three five six seven NPN transistors," et cetera.

A Yes.

Q You indicated you didn't want to get into being an expert in technology, correct, but you testified about the TTL Fairchild manual.

A Only with respect to what Dr. Schoeffler said, and that was electronics, and that's all I testified about.

Q Is it --

A And that that was different from microcomputers.

Q Did you testify that it related to an irrelevant art, because it was different from microcomputers?

A I testified that the examiner said that TTL electronics had nothing to do with this invention; that the invention had to do with the pinball surface projectile game married to microcomputers.

Q Does that --

A I testified that that is what he said.

T14

1 Q Does that mean or are we to infer from that that the  
2 Fairchild manual is not relevant to the consideration of  
3 patentability of these claims; yes or no?

4 A The answer is yes, if any claims include limitations  
5 that are related thereto.

6 I pointed out that the Fairchild manual is  
7 used as a tertiary reference in one instance. I clearly  
8 pointed out that that is what you do. You look for all the  
9 elements of the claim and you see whether there is anything  
10 in them as seen through the eye of a person of ordinary skill  
11 that justifies combining them.

12 Therefore, there can be something in that that  
13 relates to the issue. It cannot be determinative.

14 Q If you could keep your answers brief, it is a fact, is  
15 it not--

16 A Mr. Lynch, I am trying to keep my answers accurate.

17 Q It is a fact, is it not, that a TTL interface is needed  
18 between a microprocessor such as the Intel 4004 micro-  
19 processor and the electromechanical switches of something like  
20 a pinball game?

21 A You will have to refer to Dr. Schoeffler.

22 Q So your testimony about TTL and its relevance and what  
23 you were going to volunteer, you withdraw?

24 A Absolutely not. I didn't volunteer a thing. I told you  
25 about what Dr. Schoeffler said and I told you what the exam-

1 inner said.

2           Thus far I have volunteered no technical in-  
3 formation, other than this morning when I said that when I  
4 worked on computers, to keep hardware noise down we put it  
5 in a shielded copper mesh cage.

6 Q     Let's go on. Let me ask you to refer to page 10 --

7 A     I might point out that it was at that point that the  
8 Judge told --

9 Q     Page 103, please, of tab J.

10 A     At that point the Judge told me not to talk about the  
11 technology, which I stopped doing.

12           Now would you tell me what the reference is?

13 Q     Page 103, tab J.

14 A     Yes.

15 Q     At that point there is a discussion, is there not,  
16 about various noise techniques by Examiner Hum in the second  
17 paragraph beginning in the second sentence.

18 A     "Reissue applicants"?

19 Q             "If these problems could not have been reme-  
20 died by ordinary technical skills --"

21 A     Yes.

22 Q             "-- (electrical shielding, component isola-  
23 tion, minor software changes to ignore switch  
24 bounce, et cetera) would have required inventive  
25 faculties to correct and could be proved by

1 substantiated evidence, then possibly the examiner  
2 would concur."

3 A Yes, there is one word missing from that, Mr. Lynch.  
4 The word "it" should be inserted after the parentheses and  
5 before the word "would," according to Examiner Vance Hum's  
6 testimony.

7 So that is an error, and in his deposition  
8 transcript of November 29, 1980, at page 100 he put that in.

9 Q He is saying that things like electrical shielding,  
10 component isolation, and minor software changes to ignore  
11 switch bounce constitute what he regarded as being within  
12 the ambit of ordinary skills, correct?

13 A He was saying those were standard techniques according  
14 to his --

15 Q And ordinary skills, correct?

16 A Yes, I assume so.

17 Yes, he says, "ordinary technical skills."

18 Q Do you have any recollection of whether any of those  
19 items are included in Professor Schoeffler's combination of  
20 noise prevention and immunity techniques?

21 A I don't see shielding.

22 Q How about power supply isolated from logic board?

23 A Component isolation, that is there.

24 Q That is the same thing, isn't it?

25 A I don't know whether it is the same thing. They are  
similar words.

The issue is does the combination do the job.

1 Q There's no question.

2 A Okay, fine.

3 Q Now, do you know in short of any instance where there  
4 was an argument made to Examiner Hum on the items in Dr.  
5 Schoeffler's "Combination of Noise Prevention and Immunity  
6 Techniques" that were made with respect to the patentability?

7 In other words, where patentability was based  
8 upon features set forth in the "Combination of Noise Preven-  
9 tion and Immunity Techniques" column on Exhibit 469?

10 A Were arguments made? Is that the question?

11 Q Were arguments made based upon these specific features  
12 of the Flicker game, the features addressed in this column?

13 A I have no recollection, but they may well have been, as  
14 I said, if I don't comprehend fully the technology.

15 Q Now, let's get to the question of the software.

16 I have an assemblage of papers here that are  
17 excerpted from the file --

18 MR. LYNCH: If it please the Court, your Honor.

19 (Handing documents)

20 THE WITNESS: What file are you talking about?

21 BY MR. LYNCH:

22 Q Oh, I believe they're all from Plaintiff's Exhibit 1,  
23 but rather than handle the 18 volumes, I excerpted the file  
24 for purposes of discussing the software.

25 A Are you sure the patent comes in, the sheet on -- oh, I



1 see, Section 154. Okay.

2 Q Oh, I have interleaved --

3 A I don't know what this is. I'm trying to understand.

4 Q -- aspects of the statute.

5 We will identify each page as we go through it.

6 The first page is Bates number 3 of PX1,

7 correct?

8 A Yes

9 Q Now, at this point, this is the document with which the  
10 original Nutting patent was filed in the Patent Office, cor-  
11 rect?

12 A Yes.

13 Q And at that time there was an indication that, "A logic  
14 sequence to be made part of the file accompanied the appli-  
15 cation"? Correct?

16 A Yes.

17 Q Oh, I'm sorry. That's page 3 of PX2, because PX2 is  
18 the original file history and PX1 is the re-issue history.

19 A Yes.

20 Q Now, according to the practice in 1975 did the mere  
21 fact that a paper arrived in the same package with a patent  
22 application mean that that paper was part of the patent  
23 application?

24 A I suppose if it were not submitted this way, it could  
25 be not a part of it.

1 Q Please answer the question: At the time of that prac-  
2 tice -- due to the practices, or in view of the practices  
3 at that time, May 1975, if there were a submission to the  
4 Patent Office where a group of papers arrived in the same  
5 package, does their mere arrival together indicate that they  
6 are all part of a patent application?

7 A Well, I really can't answer that yes or no, because they  
8 could well be, particularly if, after the fact, there is a  
9 letter sent in to indicate that they are related.

10 So the fact that it was there is at least a  
11 good part of the way towards a demonstration that it's part  
12 of it.

13 THE COURT: The question was: Does their mere  
14 arrival at the same time mean that they're part of the appli-  
15 cation.

16 Now, you said you can't answer that yes or no,  
17 and you state as the reason that something might happen  
18 later.

19 The question doesn't take account of something  
20 that might happen later.

21 Take a chance.

22 BY THE WITNESS:

23 A Well, the presumption is that it is part of the applica-  
24 tion, and that's the best I can do.

25 THE COURT: All right. The answer is yes. The

1 answer to your question, Mr. Lynch, is yes.

2 Proceed from there.

3 BY MR. LYNCH:

4 Q Let me ask you to assume that-- let's go, then, to the  
5 declaration that was filed in Exhibit 2.

6 A Shall I pick up Exhibit 2?

7 Q In Exhibit 2 at Bates 55 there is a document which is  
8 the declaration or what used to be called the oath. Correct?

9 A Yes, this is the oath and power of attorney.

10 Q Now, at the time, according to the practices in May of  
11 1975, it was the case, wasn't it, that if this form of declar-  
12 ation were used, it had to be attached to the specification.  
13 Correct?

14 A I don't have any recollection whether that's true at  
15 the moment.

Kayton - cross

1 Q At the top it indicates that, "The player operated  
2 game apparatus with switches described in claim," and there  
3 is a little x in the box, "in the attached specification"?

4 A Yes, that's what it says, yes.

5 Q So the specification had to be attached, correct?

6 A Yes.

7 Q Now, let me add another supposition. If you assume that  
8 the software listing was not attached, was not even present  
9 in the room when this document was executed, and that the  
10 specification, that is, the typed specification, was attached,  
11 does their mere arrival in the same envelope mean to you  
12 that the software listing is part of the specification?

13 A Yes, if they were together, they were attached.

14 Q Let me ask you once more, at the time of execution,  
15 assume that the software is not attached and is not even  
16 present at the time the execution is undertaken.

17 A Does it exist?

18 Q Whether it exists or not, I just want you to assume that  
19 it was not present.

20 A Okay.

21 Q And it was not attached to the declaration. Now,  
22 assuming that fact, and, well, assuming that fact, is the  
23 software part of the specification of the patent application?

24 A If it arrived together at the Patent Office, yes.

25 Q So your criteria is arrival at the same time?

Kayton - cross

1 A No. If it didn't exist at the time it was executed, then  
2 it would not be part. If it existed and was in some appropri-  
3 ate business location, the inventor knew about it and execu-  
4 ted the oath, and it was filed in the Patent Office together,  
5 then it is attached.

6 Q Now, regardless of the fact that it was not present  
7 at the time the original specification, the oath was executed?

8 A I answered it as fully as I can in the last answer.

9 Q Now, proceed, if you will, in the assemblage of pages  
10 I have given you to the third page, which is Bates No. 96  
11 from PX-2.

12 A Yes.

13 Q In that document constitutes a declaration of  
14 Mr. Frederiksen's, correct?

15 A Yes.

16 Q Which indicated in the third paragraph that the proces-  
17 sor employed may be of any suitable and shown device and is  
18 programmed in a well known and standard procedure, correct?

19 A Yes.

20 Q If you will move then to pages to the document 001,  
21 that is Bates page 001 of PX-1, the reissue application.

22 A Yes.

23 Q Now, at that point, Bally is undertaking to retransmit  
24 to the Patent Office the materials necessary to make the  
25 reissue application, correct?

Kayton - cross

1 A It is filing a reissue application, is what it's doing.

2 Q And it indicates that, "Enclosed are the following  
3 items: One, specification and claims", right?

4 A Right.

5 Q "Two, declaration and power of attorney by assignee,"  
6 correct?

7 A Right.

8 Q "Three, informal drawings", correct?

9 A Yes.

10 Q Now, was a copy of the software listing transmitted  
11 with these documents at the time the reissue application was  
12 filed?

13 A To the best of my knowledge, they were not.

14 Q If you continue, so it is clear to the Court what  
15 thereafter occurred --

16 A I'm sorry, I didn't hear what you said.

17 Q So it is clear to the Court what occurred thereafter,  
18 at the time that the document -- I'm sorry -- at the time  
19 that the document was filed, if we go two pages, we go to  
20 0029, which is a declaration and power of attorney of Kerry  
21 A. Gainn, that's 002930 and 31 of PX-1, correct?

22 A I have an unexecuted document here, but that's what it  
23 looks like.

24 Q Well, this is what's in PX-1.

25 A Okay.

Kayton - cross

Q Are you aware that such a declaration was filed with the reissue application?

A I have no recollection offhand.

Q But such a declaration is needed, is it not?

A Yes, someone has to be given a power of attorney to prosecute the application.

Q And someone has to make certain statements, correct?

A Yes.

Q Necessary as a prerequisite for the reissue application, correct?

A Yes.

Q And the verification made here in paragraph 3 refers to the attached specification, correct?

A I didn't -- I don't know where you --

Q Paragraph 3 of 29.

A Yes.

Q And when it said, "Attached specification", the software listing was not attached, correct?

A Of course not.

Q Thereafter, at page 1574 --

A I don't think I have --

Q You don't have that. But to explain what occurred thereafter, these are various pages excerpted from the very large reissue file.

THE COURT: Let's take a 10-minute recess.

(Brief recess.)

MR. LYNCH: May it please the Court --

MR. TONE: Excuse me, Mr. Lynch.

If the Court please, we have a witness who is here simply to authenticate a document. Mr. Lynch and Mr. Goldenberg have agreed that she may sit in the courtroom and listen to this examination.

BY MR. LYNCH:

Q At page 1574, the first paragraph, is the point in PX1, Professor Kayton, where Bally, the applicant, offered to file another copy of the program listing, correct, the last --

A I have to look at it.

Q The last sentence of the first paragraph under the heading.

(Brief interruption)

BY THE WITNESS:

A "However, if the examiner believes it necessary to file another copy and so advises, the reissue applicant will do so."

BY MR. LYNCH:

Q This offer was made in response to protesters' assertion, as it is stated in the beginning of that same paragraph, that the software can be of no help in construing the claim language, correct?

A No, the applicant said it wasn't necessary, but if the



1 examiner wanted it, they would provide it.

2 THE COURT: Where is it you are reading from?

3 MR.. LYNCH: 157 -- I gave your Honor that small  
4 packet of materials just so you wouldn't have to wade through  
5 it.

6 I have another copy, your Honor, I think.

7 THE COURT: Well, here, I have the two things you  
8 gave me, but what page was it?

9 MR. LYNCH: 1574.

10 THE COURT: Okay, I have it. Thank you.

11 MR. LYNCH: And, your Honor, we referred to the  
12 last paragraph of the first -- I mean the last sentence of  
13 the first paragraph, beginning, "However, if the examiner  
14 believes..."

15 BY MR. LYNCH:

16 Q The entire matter was begun with the protesters' asser-  
17 tion that the software can be of no help, correct?

18 A Yes, that is what the protesters said.

19 Q Thereafter it is the case, is it not -- if you go to  
20 the other packet, your Honor, 1759 -- that there was a trans-  
21 mittal of the program listing, at 1759 of PX 1, correct?

22 A I don't have 1759.

23 Q In the other packet.

24 A Oh.

25 (Brief interruption)

1 BY THE WITNESS:

2 A Yes, it says, "The duplicate copy of the program listing  
3 which was filed with the original application."

4 BY MR. LYNCH:

5 Q Now, you will recall, will you not, that at that point  
6 in time what was forwarded to the office was that rather  
7 rough copy of the program listing as it is embodied in Ex-  
8 hibit 436, correct?

9 A I don't know that to be the case, but I recollect gener-  
10 ally that that probably was the case.

11 Q What happened thereafter is the examiner said, "No, you  
12 must submit a camera ready copy of this listing."

13 A I don't remember the words, but I recollect something  
14 like that transpiring.

15 Q So what happened is Bally then attempted to submit, in  
16 a document that is at 846 of Exhibit 413, a retyped version--  
17 here, I have it -- a retyped version of the program listing,  
18 correct?

19 A Yes, I believe I recollect that.

20 Q That retyped version was supposed to be in camera ready  
21 form so that the printers could just take a copy of it and  
22 add it to the printed document, correct?

23 A So that it could be photographed, yes.

24 Q The original document, or the document that is 436, is  
25 hardly in the condition to be photographed, correct; you

1 remember that?

2 A It certainly doesn't look as neat as that, that's for  
3 sure, but whether it is photographable or not, I don't know.

4 Q In the interim there was a submission by protesters --  
5 that is at 452 of PX 1 and in one of the packets before you--  
6 and the protesters objected to this on grounds that they  
7 asserted the listing involved the addition of new matter to  
8 the specification, correct?

9 A Oh, yes, I read from this earlier.

10 Q In other words, they objected?

11 A Yes, the protesters objected, you and Mr. Goldenberg.

12 Q Then in the document 142 --

13 A It is Bates 142.

14 Q Bates 142, but I think this is from one of your exhibits.

15 It is a --

16 MR. HARDING: 415.

17 BY MR. LYNCH:

18 Q From 415, Examiner Hum said, "This letter is in response  
19 to protesters' objections."

20 A Yes.

21

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8-1b1

Kayton - cross

1 Q And withdrew the requirement to insert the material in  
2 the specification. Correct?

3 A Yes. Under the practice at the time he said it wasn't  
4 necessary.

5 Q Now, is there any other basis on which the examiner  
6 might have decided to withdraw the objection?

7 A I have no idea.

8 Q It is your testimony that it was under the practice at  
9 that time. Correct?

10 A All I can do is tell you what he said. For me to  
11 speculate about what else might have been in his mind, I  
12 don't feel comfortable about doing.

13 I'm -- I reported what he said. This paper  
14 says what he did. And I don't know what you want me to  
15 speculate about.

16 Q Go back to document 1574, that first document we  
17 considered, page 1574 of PX-1.

18 A Is this a loose paper that you're referring me to?

19 Q Yes, I believe so.

20 A Okay, I have 1574.

21 Q Right below the offer, right below the offer that  
22 "Reissue applicants will do so," that is, submit the program  
23 listing, Bally says:

24 "Further, even though the program listing is  
25 part of the original application, the specifica-

2

Kayton - cross

tion by itself sufficiently defines the operation of the claimed invention, therefore it is irrelevant if the program listing is or is not part of the specification."

A. That's what it says.

Q. Bally's position before the Office was, it was irrelevant whether the program listing, Exhibit 436, was or was not part of the specification, correct?

A. No. That's what they said in that sentence.

Their position, represented by many more papers and propositions, was that it was always in it, it was part of the application, and it was part of the specification.

Now, you have referred to that sentence, and that sentence says exactly what it says. And it seems on its face in that one sentence to be not compatible with the many other statements that they made which are to the contrary.

Q. If indeed it is irrelevant, then indeed it would be the case, would it not, that no software limitations could be read in the claims. Correct?

A. Correct. If it is irrelevant, directly contrary to what the examiner held. He said it was required on the Section 112.

Q. In response to this statement by Bally that the "specification itself sufficiently defines the operation of the

Kayton - cross

1 claimed invention, and it is irrelevant if the program  
2 listing is or is not part of the specification," in response  
3 to that the examiner said: Well, I'll withdraw the require-  
4 ment.

5 A That's completely incorrect. You have failed to read  
6 the paragraph above.

7 Q The fact of the matter is, is when the examiner with-  
8 drew the requirement, Bally was on record saying it was  
9 irrelevant whether it was in or out. Correct?

10 A Bally said that in that sentence, and in the paragraph  
11 above said the opposite.

12 Q In connection further with the matter of the items  
13 that were said, or whether the reissue file history implied  
14 all the various items of 469 in the claims, I would like you  
15 to refer, Professor Kayton, to PX-413, Volume 2, at tab 16.

16 THE COURT: Would you let me have that again?

17 MR. LYNCH: I'm sorry, your Honor. PX-413, that  
18 is the applicant's file. It's in volume 2 of 3 at Bates No.  
19 527.

20 THE COURT: I've got it.

21 MR. LYNCH: The remaining pages after 527, I didn't  
22 reproduce -- the remaining pages, if I can ask your Honor to  
23 refer to that, beginning at 528. (Handing document.)  
24 BY MR. LYNCH:

25 Q Do you have that page?

4

Kayton - cross

1 A Yes.

2 Q At 527, or actually if we go back a page to -- I'm sorry.

3 I cited you the wrong page.

4 Page 443 of the same volume, Bates 443.

5 A I have 443.

6 Q The first full paragraph, this is a paper filed by  
7 Bally, correct, it's in the appellant's 413 collection?

8 A Yes.

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1 Q Now, the middle paragraph says, "To put to rest once and  
2 for all protesters' repeated erroneous contention that the  
3 reissue applicants' conception did not contain all the  
4 elements of the claimed invention, applicants submit the  
5 claim chart of Appendix B. This clearly shows all of the  
6 elements of the claimed invention as defined in Claim 45 for  
7 an example and contains correlated references to the evidence  
8 in the record establishing the conception of these elements  
9 in December, 1973." Do you see that, Professor Kayton?

10 A Yes.

11 Q Now, I am going to -- I have here a reproduction of  
12 Exhibit B, Appendix B that is.

13 MR. LYNCH: That is what this is, your Honor,  
14 the Appendix B referred to.

15 BY MR. LYNCH:

16 Q (Continuing) And this Appendix B supposedly shows  
17 evidence that will establish that all of these elements, in-  
18 cluding the elements on Plaintiff's Exhibit 469, were con-  
19 ceived as of December, 1973. Correct?

20 A I don't know.

21 Q Well, that's what it says, isn't it?

22 A Well, it says that the claimed invention; I don't know  
23 what you are making reference to --

24 Q It says Claim 45, does it not?

25 A Right, yes, and there are the elements and there are a



1 record of citations.

2 Q Now, I ask you to turn with me through the evidence that  
3 is appended to the little booklet I have given you. This is  
4 the evidence that is cited in Appendix B as supporting, as  
5 showing conception or all of the elements of 469.

6 A It shows conception of everything claimed in 45, is  
7 what it says.

8 Q Everything claimed in 45. And 469 was based indeed on  
9 Claim 45, was it not?

10 A I don't know what it is based on. There are a whole  
11 bunch of claims there and I have no basis for knowing with  
12 those technical statements what it is making reference to  
13 specifically.

14 Q Well, suffice it to say --

15 A You may assert to me anything and I will accept it as a  
16 proposition, but based on my own technical knowledge, I can't  
17 say that. I am not proffered as a technical witness, I am  
18 not a technical witness and I don't want to be a technical  
19 witness.

20 Q Turn with me to the first exhibit B-R. Do you recognize  
21 that exhibit as a sketch reproduced by Mr. Frederiksen from  
22 something he put on the blackboard in December, 1973?

23 A I recollect he testified that he did do that, and I  
24 cannot say that that is what he did.

25 Q Exhibit B-S, is that a similar sketch?

1 A It is a similar sketch.

2 Q Nothing about software there, is there?

3 A I don't see a program listing or a flow diagram. To  
4 the extent that that hardware may require software for imple-  
5 mentation, I don't know. It may be. You are asking the  
6 questions that require a technical knowledge beyond my com-  
7 petence.

8 Q If you go to the next exhibit, C-A, that is the next  
9 item cited as basis for a complete conception of all the  
10 elements of Claim 45 in December, 1973.

11 A Well, are you representing to me that each of these indi-  
12 vidually supports all of the elements? The claim?

13 Q I am representing to you that this was what was filed as  
14 supportive of the elements of Claim 45.

15 A Each exhibit C-A and C-B is represented to support all  
16 the elements of 45? I am not clear on your question.

17 Q Why don't we go back to the statement made by Bally.

18 A It says: "The claim chart shows all of the elements,"  
19 and I see --

20 Q It's an accumulation of them.

21 A Yes, I see that with respect to each element, they list  
22 a whole bunch of different things. And the whole bunch of  
23 different things includes those exhibits, I understand.

24 Q Do you know if there is any discussion in here where --  
25 have you -- you have reviewed these exhibits because these

1 exhibits and these affidavits were submitted in the Patent  
2 Office, correct?  
3 A You may recollect that the answer was I saw the technical  
4 exhibits only to scan and not to read, for technical dis-  
5 closure. That was my original statement. I read all of the  
6 papers in detail other than the technical exhibits, which I  
7 looked at and verified that they were generally what they pur-  
8 ported to be, but in terms of reading them for their technical  
9 content, I did not and never did, nor would there be any  
10 reason for me to do so.

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1 Q Do you find in the next item, C-A, any software listing?  
2 A Mr. Lynch, I would have to read the whole thing, and  
3 even if I read it, I would not be competent to say whether or  
4 not a particular section inherently talks about or requires  
5 software. You are seeking water out of a stone.

6 Q The reissue proceedings did result in some of the orig-  
7 inal claims being amended, correct?

8 A Yes.

9 Q And in pursuit of that, there were declarations filed  
10 by Bally that said that the original patent was defective by  
11 reason of it, by reason of Bally claiming more than they had  
12 a right to claim, correct?

13 A I have to look at the exact words of the oath. That  
14 is a classic re-issue oath statement, however. But, of  
15 course, it doesn't mean that the patent's invalid.

16 Q But they did make a sworn statement, some sworn state-  
17 ment has to be made to support a re-issue, right?

18 A Sure, yes.

19 Q Now, we do know, do we not, --

20 A Let me just answer that another way.

21 I seem to recollect that the original oath  
22 was under the old procedure dealing solely and exclusively  
23 with no defect reissue, seeking solely an examination of  
24 prior art in this litigation. That's my recollection. And  
25 only thereafter was there amendment of claims and a subsequent

1 re-issue oath was filed.

2 Now, that's my recollection and I don't know  
3 absolutely whether that is correct.

4 Q Now, Claim 1 of the original 232 patent was rejected,  
5 was it not, by the examiner?

6 A I believe it was at one time, but I can't say -- well,  
7 I know it was rejected at some time during the prosecution.

8 Q So original Claim 1, and in the reissue patent as it  
9 issued, can the Court or anyone readily see the changes that  
10 were made?

11 A Yes, in the reissued patent.

12 Q What are the changes that were made in Claim 1? So  
13 Claim 1 as it was filed and as I have it here, can you ver-  
14 ify that, as I have it on this placard, was held unpatent-  
15 able by the Office, correct?

16 A I can't verify that without comparing it.

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1 Q Well, assume --

2 A Under your assumption --

3 Q -- this is Claim 1 of the original '232 patent. It  
4 was held unpatentable by the Office, correct?

5 A At one time I believe it was, yes.

6 Q Are you suggesting that -- well, it was amended, was it  
7 not?

8 A Yes, it was amended.

9 Q And additions were made to it, correct?

10 A Yes, and there all the italicized words that appear in  
11 Claim 1 of the reissue patent, and one word was taken out,  
12 and that was the word in brackets, "Means," and the word "mass"  
13 was substituted for that. In essence this was making it  
14 a surface projectile claim.

15 Q So the claim was amended to specify that the game  
16 apparatus was a surface projectile game rather than merely a  
17 game that had a physical mass, correct?

18 A Well, it said a lot of things.

19 The words are, "a game housing," "a game  
20 surface for supporting a projectile," and various other things.  
21 I don't want to characterize the claim be-  
22 cause I cannot.

23 Q Let me characterize --

24 A At the end it says, "and wherein said processor response  
25 means and multiplexing means are contained in said housing."

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Kayton - cross

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So that suggests to me it did two things.

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One, it made it a pinball type game, surface projectile, and it also made it unitary, I suppose, where it says, "and wherein said processor response means and multiplexing means are contained in said housing"; but that is just a layman's view of what it was.

Q Without the layman's view, what it did do was insert right here after the word "comprising," "a game housing," correct?

A Yes. Yes, that is in italics.

Q That is in italics in the '441 patent?

A Right.

Q Then here after "a physical mass capable of motion" --

A Yes, okay.

Q Immediately after "a physical mass capable of motion," what was inserted was --

A "a game surface --"

Q "a game surface for supporting the surface projectile, said surface being contained in the housing."

A "...said housing."

MR. GOLDENBERG: Your Honor, do you have a copy of the original patent, or do you want one?

THE COURT: I have the reissue here.

MR. LYNCH: That is the reissue that we need, your Honor, with the italicized language.

Kayton - cross

1 BY MR. LYNCH:

2 Q Then the "player control means" was modified to recite  
3 that the mass was a surface projectile, correct?

4 A Yes.

5 Q So what occurred in that portion of the amendment was  
6 that the claim was narrowed from a game such as the IQ Computer  
7 game, which had reels going around, to a game that had a  
8 projectile on a surface, correct?

9 A No, I don't know what it was narrowed from. It was  
10 written to read on a surface projectile game.

11 Q It originally was not?

12 A That is correct, that is what the italicized words  
13 mean.

14 Q It was then amended to read on a surface projectile  
15 game, correct?

16 A Correct, absolutely correct.



Kayton - cross

-2-1LP

ett

1 Q Which means the game would have had to have a ball or  
2 a puck or something that moved around on a surface, correct?

3 A I don't know the game art, but it seems reasonable to  
4 me.

5 Q Another amendment that was introduced into the claim was  
6 an amendment that everything had to be in a housing, correct?

7 A That is what it seems to me.

8 Q At numerous points it says, "a plurality of display  
9 means connected to the housing," in italics, and that was  
10 added --

11 A Well, I don't see that offhand, but if you say so.

12 Q Column 15, line 12.

13 A "...connected to said housing," yes.

14 Q Down at the end of the claim it says, "wherein the  
15 processor response means and multiplexing means are con-  
16 tained in the housing," correct?

17 A That is right.

18 Q Do you have any recollection, Dr. Kayton, of what the  
19 situation was with claims such as 56?

20 A No.

21 Q You don't recall what occurred with those?

22 A No, I have been focusing on the claims in suit, 45  
23 through 49 and 95, except that I remember very well Claim  
24 1 being one of the claims that the applicants were prepared  
25 to narrow to gain an allowance of the case.

1 Q Fine. So if we look --

2 A And they left it in that form.

3 Q If we look at original Claim 1 the way it existed, that  
4 claim was unpatentable, correct?

5 A No, I am not prepared to say that at all.

6 Q Was held unpatentable by the Office and only allowed  
7 after amended?

8 A No, I am not prepared to say that at all.

9 I don't know that there are no claims comparable  
10 to that claim still in the case. There may be, but there may  
11 not be.

12 I do know that there was a history wherein  
13 in order to gain allowance and prompt issuance of the patent,  
14 the examiner was prepared to allow it if the claims were  
15 restricted to a unitary housing and a pinball game.

16 This claim met those requirements and was  
17 left in that form, but it is no question that there were  
18 other claims that were broadened, made generically broader,  
19 and were not restricted in any way to a unitary housing.  
20 For example, Claim 45 does not seem to require a unitary  
21 housing.

22 Q It does not. Claim --

23 A So I cannot respond to your question the way you wish.  
24 It was not unpatentable ultimately for that reason. Claim  
25 45 was patentable.

1 Q But you talked about the surface projectile art. You  
2 have no recollection of what transpired with Examiner Hum  
3 and the considerations that resulted in the amendment of  
4 Claim 1 to be a surface projectile game?

5 A Yes, yes, and Claim 45 is a pinball game, too.

6 Q That is correct, and Examiner Hum held that the claims,  
7 regardless of other limitations, would be patentable only if  
8 they were limited to surface projectile games, correct?

9 A I can't characterize the words, but I can tell you that  
10 he said that this was the pinball or surface projectile art  
11 that he would consider the claims allowable in. To the extent  
12 that they read on other arts, then that was something he was  
13 not going to allow.

14 Q Regardless of the scope of other claims, you will give  
15 me Claim 1, as it is specifically set forth, was held to be  
16 unpatentable?

17 A No. We look at claim 1 and we find it is directed to

18 "a game apparatus," and here we have a game apparatus.

19 correct?

20 A Correct.

21 Q Now, in all of the evidence, is there any evidence

22 showing that the prior art was directed to a game apparatus

23 for storing the signals? And if so, what was the evidence?

24 prior art of the prior art?

25 Correct?

1-1b1

Kayton - cross

1 Q Without amendment; it was not held unpatentable without  
2 amendment.

3 A It was rejected, that is correct.

4 But what I'm trying to point out is that  
5 other claims -- that that was amended, it was restricted, it  
6 was left restricted, but other claims were broadened.

7 And I am not now prepared to go through a  
8 claim analysis on that basis. There are 95 claims.

9 I will do it happily if I'm given adequate  
10 time to do it, and that would take about a day.

11 Q Professor Kayton, Claim 1 was rejected as unpatentable  
12 and not allowed until it was amended. Correct?

13 A It was rejected as unpatentable.

14 Q And not allowed until amended.

15 A No, it was allowed after it was amended. There is not  
16 necessarily a causal connection.

17 Q If we look at claim 1 and claim 45, in claim 1 we have  
18 "a game apparatus," and here we have "a pinball game."  
19 Correct?

20 A Correct.

21 Q Secondly, in claim 1 we have "a processor having pro-  
22 gramming means for programming the processor and memory means  
23 for storing the signals," and in claim 45 we have "a  
24 processor having programming means and memory means."  
25 Correct?

Kayton - cross

1 A Correct.

2 Q In claim 1 we have "a physical mass capable of motion,"  
3 and in claim 45 we have "a ball." Correct?

4 A Right.

5 Q In claim 1 we have a "player operated control means for  
6 effecting the motion of the physical means," and in claim 45  
7 we have a "player operated means for ejecting the ball onto  
8 the playing field whereby the ball may roll downwardly."  
9 Correct?

10 A That's what it says, yes.

11 Q Now, the next item, "a plurality of response means for  
12 detecting the mass," et cetera, is substantially the same  
13 language used in claim 45?

14 A "Ball" is substituted for "mass" and that's all that I  
15 see that is different.

16 Q The next item, "a plurality of display means," as  
17 recited in the original claim 1 is recited substantially the  
18 same way in claim 45.

19 A As far as I can tell the only difference is substitution  
20 of "mass" for -- well, you're blocking the other one -- "mass"  
21 for "ball," and, as you pointed out, the word "each display,"  
22 "means having a display activation," and the other one saying  
23 "having display activation means associated therewith."

24 Q If anything, claim 1 would be somewhat narrower in  
25 scope, correct?

Kayton - cross

1 A I'm not prepared to say.

2 Q Well, they're very similar, correct?

3 A They're very similar.

4 Q The next item is the "multiplexing means operatively  
5 connected," as recited in Claim 1; it's recited the same way  
6 in claim 45.

7 A That's exactly the same, I believe.

8 Q And the last item, "the processor having means for  
9 storing the signals," and "the processor having the means for  
10 storing the signals" in the original claim 1 and 45, correct?

11 A Yes, that looks exactly the same.

12 Q Now, this claim, claim 1, has exactly the same language,  
13 and someone reading it would refer to the specification to  
14 find out what these various means were, correct?

15 A Are you asking me to construe means plus function  
16 clauses?

17 Q No. I am asking you: That claim 1 would be construed  
18 in the same way as claim 45. Correct?

19 A Except to the extent that the differences in language  
20 mean something.

21 Q Then it is the case that claim 1 would include all of  
22 the combination of hardware and software to achieve operation  
23 of an arcade game -- not a surface projectile game -- in an  
24 arcade environment. Correct?

25 A It talks about a game apparatus generically, and I don't

Kayton - cross

1 know the definition of game apparatus.

2 Q Now, it isn't the case that, according to you, that any-  
3 one would look at the physical mass and say it has to be a  
4 ball, because a ball is the only type of physical mass  
5 disclosed?

6 A I don't understand what you're talking about.

7 Q Pass the question.

8 The claim therefore, claim 1, when all of  
9 this combination of hardware and software was applied to, not  
10 a pinball game, was rejected by the office, correct?

11 A Yes, that claim was rejected.

12 Q And was made allowable by addition of a game housing,  
13 making the remaining items attach or be in the game housing,  
14 and by changing the mass to a surface projectile. Correct?

15 A I am not prepared to say correct to that at all. I  
16 have spent quite a bit of time explaining why I am not pre-  
17 pared to say that.

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1 Q Now, you spoke about the declaration that accompanied  
2 this reissue application. I show you Mr. Carnes' declaration  
3 that says, "That Bally Manufacturing Company verily believes  
4 the original patent to be partly inoperative or invalid  
5 through errors by reason of the examiner stating that the  
6 patentees were claiming more than they had a right to claim  
7 in the patent with respect to original claims," and a number  
8 of them including 1, "particularly in that said original  
9 claims were deemed by the examiner as not being expressly  
10 limited to 'a game apparatus' having 'a service projectile'  
11 as the 'physical mass' "--

12 A Yes, that's what it says.

13 MR. KATZ: Do you have the citation?

14 MR. LYNCH: 337 of Volume 2 of 413.

15 BY MR. LYNCH:

16 Q So it is the case then that Claim 45, which is the  
17 claim in suit, recites the same multiplexing means and the  
18 same processor means as in original rejected claim 1, correct?

19 A Those are exactly the same words and limitation. And  
20 Dr. Schoeffler so testified.

21 Q Do you have handy Plaintiff's Exhibit 415 at tab -- I  
22 don't know -- tab J?

23 A Mr. Lynch, am I going to need these exhibits any more  
24 that you gave me?

25 Q Yes, you probably will. I will take them, though, and



1 I will organize them for you.

2 A No, that's all right. If I am going to need them, I  
3 will keep them.

4 Which exhibit?

5 Q 415 tab -- the one that has tab J in it.

6 A You mean 413.

7 No, I'm sorry, I'm wrong this time. 415 J.  
8 Comedy of errors.

9 Yes, I have it.

10 (Brief pause)

11 MR. LYNCH: Excuse me a moment, your Honor. I  
12 apologize to the Court.

13 BY MR. LYNCH:

14 Q Well, go to tab K. Tab M, I'm sorry, at page 415. I  
15 mean page 124, I'm sorry. I can't keep all these--

16 A All right, tab M.

17 Q Now, this document at tab M of 415 is a document which  
18 contained a number of findings to which you referred, correct,  
19 Professor?

20 A That is correct.

21 Q At page 123 -- on page 124, rather -- page 123, I apolo-  
22 gize, at page 123, the examiner indicates, "The inclusion of  
23 the March 21, 1974 Electronics article would on the face of  
24 it seem to be suggestive of the hybrid combination proposed  
25 by protesters to establish a prima facie case of obviousness."

1                   What is meant by "a prima facie case of ob-  
2                   viousness?"

3       A       A prima facie case of obviousness, as I indicated  
4       earlier, is a showing of two or more references which would  
5       seem to suggest their combination, with respect to a  
6       claimed invention. But it says it would seem to be sug-  
7       gestive of it. It doesn't say it is. That's what the  
8       examiner said.

9       Q       And earlier the examiner quoted a case that said,  
10       "A prima facie case of obviousness is established when the  
11       teachings from the prior art itself would appear to have sug-  
12       gested the claimed subject matter to a person of ordinary  
13       skill in the art."

14       A       Yes, that's virtually identical to what I just said.

15       Q       Now, at page 124, the examiner goes on to say,

16                   "At first blush it would appear that the  
17                   groundwork has been laid in accordance with the  
18                   Graham decision to support a case of obviousness."  
19                   Is that a finding of prima facie obviousness?

20       A       No, it says at first it would appear, but it is the  
21       opposite. It goes on to point out the contrary is the case.  
22       Q       Fine. Then the examiner entered 22 specific fact  
23       findings, correct?

24       A       Yes, he set forth certain facts had been considered, and  
25

1 those are 22.

2 Q Now, the first one he indicated was he found an article  
3 of EE systems engineering today where a Mr. Ross Sheer of  
4 Bally was quoted, indicated scepticism, correct?

5 A Yes.

6 Q He also found that Ross Sheer was a man one ordinarily  
7 skilled in the art, correct?

8 A That's what he stated, yes.

9 Q Do you know what Ross Sheer's background was in elec-  
10 tronics?

11 A I have no idea.

12 Q You did know that Mr. Sheer's deposition was filed in  
13 these proceedings, do you not?

14 A I at this moment have no recollection one way or the  
15 other.

16 Q If Mr. Sheer was a man who had no background in elec-  
17 tronics, as I believe the record will support he testified,  
18 was the examiner in error by labeling him one ordinarily  
19 skilled in the art?

20 A Oh, he would clearly be in error, but it doesn't de-  
21 tract necessarily from the propriety of the holding of  
22 scepticism.

23 A I have no idea.

24 I have no idea.

25 I have no idea.

1 Q Now, he cited as the holding for scepticism Exhibit  
2 1-F, Defendants' Exhibit 1-F, which is an E.E. Systems  
3 Engineering Today article that says, "Electronics plays  
4 the pins," November, 1973.

5 I ask you to refer to the bottom of the right-  
6 hand column on the first page and the top portion of the  
7 left-hand column.

8 A Yes.

9 Q Does this --

10 THE COURT: Do I have that?

11 MR. LYNCH: Yes, your Honor, 1-F, I believe --  
12 is it over here?

13 (Brief interruption)

14 THE COURT: Here we go.

15 1-N?

16 MR. LYNCH: 1-F, your Honor.

17 THE COURT: F, got it.

18 BY MR. LYNCH:

19 Q At the bottom of the right-hand column on the first page,  
20 or the second page of the exhibit, the first page of the  
21 article, and at the top of the left-hand column, is the  
22 quote of Mr. Sheer on which the examiner relies, correct?

23 A I don't understand that to be the case. That statement  
24 indicated scepticism. I don't see the scepticism indicated.  
25 Q You don't see scepticism there, do you?

1 A No.

2 THE COURT: What column are you in?

3 MR. LYNCH: It is down at the bottom of the right-  
4 hand column of the first page of text and then continuing  
5 on to page 38.

6 THE COURT: All right.

7 MR. LYNCH: Where Mr. Sheer is quoted.

8 THE WITNESS: This is where he is saying it seems  
9 to him that electronic pinballs would be too expensive com-  
10 pared to the electromechanical and, therefore, could not be  
11 anything that could be useful.

12 BY MR. LYNCH:

13 Q Is that the type of technological scepticism that sup-  
14 ports patentability?

15 A Oh, it could very well. If the operative pinball game  
16 was very expensive because it used the kinds of noise immun-  
17 ity techniques in order to be operative that were very ex-  
18 pensive, then that would be such scepticism, yes.

19 Q It doesn't say that here, does it?

20 A Well, I just responded to your question. I don't under-  
21 stand.

22 Are you asking is what I have just said  
23 responsive to your question in the article? No, but it is  
24 an explanation of what he may be talking about.

25 Q Is the type of scepticism evinced by Mr. Sheer in the

1 part particularly cited by the examiner, is that technological  
2 scepticism?

3 A Yes, necessarily, if what we are talking about is the  
4 economics of an electronic pinball game, that can't compare  
5 with electromechanical.

6 Q My question --

7 A The answer is yes.

8 Q And that is what we are talking about, is that correct;  
9 you understand that that is the scepticism that Examiner  
10 Hum was referring to apparently?

11 A What scepticism?

12 Q Scepticism about the fact that it might cost too much  
13 to have a microprocessor -controlled pinball game.

14 A That is part of this invention. Everyone knows that  
15 there are hardware techniques that are expensive enough to  
16 make a pinball work.

17 Q If we go down to Finding Number 11 --

18 A Yes.

19 Q In Finding Number 11, Examiner Hum found that the  
20 Flicker game was reduced to practice by Nutting and Frederik-  
21 sen on September 26, 1974, correct?

22 A Yes.

23 A

24

25

1 Q Assume that Examiner Hum did not find a reduction to  
2 practice by Nutting and Frederiksen on September 26.

3 A Yes.

4 Q If you assume that fact, what would have been the effect,  
5 if anything, in the Patent Office?

6 A Nothing, exactly nothing. There was no prior art that  
7 I know of before the filing date.

8 Q But what would have happened is the filing date of May  
9 13, 1975 would have been the operative date rather than  
10 September 26, '74, correct?

11 A Unless there was a subsequent actual reduction to  
12 practice before the filing date.

13 Q Was there any evidence of a subsequent one submitted  
14 in the present record in the Patent Office?

15 A No.

16 Q So based on that limited record and assuming that was  
17 the only record --

18 A Yes.

19 Q -- if Examiner Hum improperly ascribed a date of Septem-  
20 ber 26, 1974 to Nutting and Frederiksen as a reduction to  
21 practice date, then properly anything prior to the filing  
22 date would have been prior art, correct?

23 A Incorrect. I said if there was an actual reduction to  
24 practice earlier, then it was an actual reduction to prac-  
25 tice earlier.

1 Q Assuming that the total record is what is in the Patent  
2 Office --

3 A Oh, okay, then, fine, then the effective date is the  
4 filing date.

5 Q Now go down, if you will, to Finding 14.

6 A Yes.

7 Q That finding indicates that Atari's Delta Queen was  
8 successfully shown at the October-November 1974 MOA show,  
9 correct?

10 A That is what those words say.

11 Q Skip down a couple -- Examiner Hum was consolidating his  
12 findings at this point, correct?

13 A Yes.

14 Q Skip down to several more findings, to Finding Number 17.

15 A Yes.

16 Q In Finding Number--

17 A I take that back. When you say consolidating, what he  
18 was in fact doing was highlighting his findings.

19 As you will see in the paragraph immediately  
20 after the 22 elements, he made it very clear that these  
21 were highlights because he said, on Bates 126, "From an  
22 evaluation of the substantial evidence of record, the record  
23 would seem to support a finding of unobviousness on the  
24 basis of what actually did occur in the art and secondary  
25 considerations set forth in the Graham case."



fols

1 He was in short with those 22 items making  
2 reference to categories of subject matters in the record, and  
3 he was not consolidating them. He was using them as handles,  
4 fact handles.

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24-1 b1

Kayton - cross

1 Q Professor, there is no question.

2 Refer to 17.

3 A Yes.

4 Q In 17 the examiner found that the Delta Queen was suc-  
5 cessfully demonstrated at the Asilomar conference, correct?

6 A That's what that statement says.

7 The record has a lot of information that  
8 explicates both that and the Delta Queen statement in 15.

9 Q When was the Asilomar conference?

10 A It says April '75.

11 Q That is before the filing date here, correct?

12 A That's right.

13 Q And according to the Bracha -- the 131 affidavit, the  
14 Bracha machine itself was reduced to practice prior to May 10,  
15 1975, correct?

16 A That's the allegation in the Rule 131 affidavit.

17 Q That is the allegation by Bally, correct?

18 A It's their affidavit.

19 Q Now, let's go back up to Nos. 11 and 12, and 11 and 12  
20 is where Examiner Hum found that there was a reduction to  
21 practice on September 26, 1974, correct?

22 A That's correct.

23 Q Was Examiner Hum at that time informed that the software  
24 that was in -- or that the software submitted as part of the  
25 file was inoperative?

2

Kayton - cross

1 A It was not inoperative according to the testimony in  
2 this trial.

3 Q It in fact, if loaded into a machine, the machine would  
4 not work. You did hear that?

5 A Oh, sure. A person of ordinary skill in the art wouldn't  
6 load it or, if he loaded it, he would immediately change it.

7 Q Was Examiner Hum informed of that?

8 A As far as I know no one knew that.

9 Q Was Examiner Hum informed that the software submitted  
10 as part of the file was incomplete and didn't have a look-up  
11 table?

12 A I don't know what the look-up table is or whether it had  
13 it or didn't.

14 Q Was Examiner Hum informed that the Flicker machine did  
15 not have individual isolation diodes on the switches in the  
16 playfield?

17 A Mr. Lynch, I have no encyclopedic recollection of the  
18 record, and I have no detailed knowledge of any of those  
19 technical matters.

20 If what you're referring to is the issue in  
21 this case about distinctions between the program in the patent  
22 and what was --

23 Q If your answer is, "I don't know" --

24 A Well, the answer is, I don't know. I've been trying to  
25 tell you that.

3 Kayton - cross

1 Q Was Examiner Hum informed that the Flicker game bore  
2 chips that were dated after September 26, 1974?

3 A Well, I'm sure he was not. I have no recollection of  
4 that in the file wrapper at all, or any of the other things  
5 that came up in this trial.

6 I'm sure he was not told about any of those  
7 things, and I can answer the whole thing in one fell swoop:  
8 Anything that was presented was, as far as I know, not pre-  
9 sented to him.

10 Q Was Examiner Hum informed as to when the Flicker machine  
11 was transmitted by Bally to MCI?

12 A I have no recollection of that subject at all.

13 Q Do you have any recollection of the fact that an affi-  
14 davit was sent to the Patent Office signed by Mr. Nutting  
15 which indicated, in response to an argument by the protesters  
16 that the machine was only sent to MCI on August 20, that there  
17 was a big invoice mixup with respect to the Flicker game sent  
18 to MCI?

19 A I don't have any recollection of that.

20 (Brief interruption.)

21 BY MR. LYNCH:

22 Q Was Examiner Hum informed that the Flicker machine did  
23 not correspond to the drawings that were submitted in the  
24 affidavits?

25 A I have no idea what you're making reference to, so I

Kayton - cross

1 can't say.

2 Q Well, there were affidavits submitted, were there not,  
3 to establish the 26 September 1974 reduction to practice  
4 date?

5 A Yes. Yes.

6 Q And in connection with those, circuit diagrams were  
7 submitted, correct?

8 A I don't at the moment recollect.

9  
10 a bill dated August 24, 1974, for the

11 invoice I received at David's office.

12 Invoice there is no way to tell.

13 copies were received from David's office.

14 of several invoices.

15  
16 A Yes.

17 Q Now, I remember that

18 was supplied and there only exists one

19 version. I am asked that it is

20 only one of the two for the circuit

21 that was then used at the time.

22 A Yes. That is correct.

23 That is the only invoice we have.

24 Yes, that is correct.

25 Yes, that is correct.

25-1 b1

Kayton - cross

1 Q I show you what was submitted as an affidavit of David  
2 Nutting in the case before the Patent Office where he said  
3 that, "For the next four to five months after receiving  
4 Flicker pinball machines, I received several invoices from  
5 Bally requesting David Nutting & Associates to pay for these  
6 pinball machines. After receiving several such invoices from  
7 Bally, I informed Bally personnel that I was receiving the  
8 invoices and I told them I believe this to be a billing error."

9 Then he went on to say, "Attached hereto is  
10 a bill dated August 24, '74 that I recognized as one of the  
11 invoices I received at David Nutting. From the date of this  
12 invoice there is no way to determine when the pinball ma-  
13 chines were received from Bally because it could be any one  
14 of several invoices."

15 Do you remember that?

16 A Vaguely.

17 MR. LYNCH: I represent to your Honor that Bally  
18 has stipulated there only exists one invoice. They have  
19 searched. I have asked that it be searched. There exists  
20 only one invoice for the Flicker machine. It is the invoice  
21 that had been marked as Exhibit 2H, your Honor.

22 MR. TONE: That statement is correct, your Honor,  
23 that is the only invoice we have been able to find.

24 THE COURT: All right.

25 BY MR. LYNCH:

Kayton - cross

Q Now, given what the examiner would have had all of this information -- strike that.

A Given that the examiner would have been informed of all of these items, without Dr. Schoeffler's testimony, that is, if protesters had been able to assert to the examiner that the Flicker game did not conform to the software file, that the Flicker game did not conform to the drawings, that the Flicker game did not have diodes on the playfield, that the Flicker game had late-dated chips; would the examiner, in your opinion, have found a reduction to practice occurring on September 26?

A He certainly would if he had felt the differences were of no significance to a person of ordinary skill in the art. If he felt they were significant and that person of ordinary skill in the art could not make the game function using what was disclosed to him, in the ordinary course of his skill, he would say that that was not a reduction to practice of that.

Q Were arguments made to the Patent Office throughout the entirety of the proceedings that indicated that the Atari games would hang up on a stuck switch?

A I recollect -- well, what Atari games, specifically --

Q The early Atari games.

A Yes, the El Toro and the Delta Queen, of course. And that was the testimony of the Atari Cyan people.

A. I have no recollection of that having been said, nor do I have any recollection from any of the testimony in this case that Fliciker was inoperative because of a stuck switch, as Delta Queen and El Toro were.



Kayton - cross

5-2b1

-eww 1

Q It is the case, is it not, at tab B of Exhibit 415,  
page 7 of that office action, --

A Tab D as in David?

Q B. It indicates, or Examiner Hum indicates, "Absent  
factual evidence to the contrary, the proofs presented in  
Exhibits V, W, AA, AB, et cetera, to corroborate the  
affidavit of Frederiksen identified as Exhibit T in Book 2 of  
paper 31 are deemed convincing to establish a reduction to  
practice dated on September 26, 1974." Correct?

A Yes.

Q If it is a fact that the software, the hardware were  
different and the chips were late dated, among other factors,  
is it not the case that that is evidence to the contrary?

A No, not necessarily. It may be. It depends on whether  
to a person of ordinary skill in the art it is important.

The plaintiffs have spent a lot of time  
trying to demonstrate that that is not the case.. If that  
testimony is credible, Examiner Hum wouldn't have cared at  
all. If the testimony is not credible, he would have.

Q What could one of ordinary skill in the art do about  
late-dated chips?

A I don't know what you're talking about.

Q You said if someone of ordinary skill in the art would  
have understood this, they would have been, the examiner would  
have rejected it. What if the examiner was told there was

1 late-dated chips in the machine?

2 A What is the significance of a late-dated chip? You had  
3 a ten-year old machine. We don't know when the chips were  
4 in. We don't know what chips were in at that time.

5 Q Precisely.

6 A But we are looking at a machine ten years later. What  
7 we do know was on September 26, a lot of people saw the  
8 machine work and the tests for noise were done with a  
9 Vandegraf generator and electric drill. That's what we know.  
10 You have pulled chips out of a machine ten years later.  
11 What's the significance of it? I don't know.

12 A I think the significance is that it is

13 a very old machine that still works.

14 It is a very old machine that still works.

15 It is a very old machine that still works.

16 It is a very old machine that still works.

17 That's all.

18 It is a very old machine that still works.

19 It is a very old machine that still works.

20 That's all.

21 It is a very old machine that still works.

22 It is a very old machine that still works.

23 It is a very old machine that still works.

24 That's all.

25 It is a very old machine that still works.

1 Q One last question: Once again, page 415 at Bates  
2 number 17. Exhibit 415 of Bates number 17.

3 A I have it.

4 Q At that point, in the footnote, did Examiner Hum give  
5 a definition of multiplexing that he used during the prosecu-  
6 tion of the reissue application?

7 A He gave a definition, but I have no idea whether that's  
8 the definition that was used throughout.

9 Q Do you have an impression from your review of the file  
10 history as to whether Mr. Hum used that definition through-  
11 out?

12 A I have no impression, because I have no basis techno-  
13 logically for making that determination.

14 MR. LYNCH: No further questions, your Honor.

15 THE COURT: How much do you have, Mr. Goldenberg?

16 MR. GOLDENBERG: I perhaps have about a half an  
17 hour, Judge.

18 THE COURT: About a half an hour?

19 MR. GOLDENBERG: Do you want to put it over until  
20 tomorrow morning?

21 THE COURT: Well, we won't be able to complete it,  
22 so I think what we will do is put it over until tomorrow  
23 morning. And how about we meet at ten o'clock tomorrow  
24 morning?

25 MR. TONE: Would it, if your Honor is anxious +

1 leave the bench, I understand, but would it be possible to  
2 consider at this point a couple of matters of the admissi-  
3 bility of documents that Mr. Lynch and I are perhaps near  
4 agreement on, but we may need your Honor's help?

5 THE COURT: Sure.

6 THE WITNESS: Your Honor, may I step down?

7 THE COURT: Yes, you may step down.

8 (Witness temporarily excused.)

9 MR. TONE: There are two in particular. One is  
10 marked Plaintiff's Exhibit 87. That purports to be a memor-  
11 andum to the file from Mr. Telnas. My understanding of  
12 the conversation between Mr. Lynch and Mr. Mathias by tele-  
13 phone is -- oh, I'm sorry, Mr. Goldenberg. I'd better get  
14 Mr. Mathias up here; he was a party to the conversation.

15 Will you proceed?

16

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1 MR. MATHIAS: It is my understanding, your Honor,  
2 that with respect to Plaintiff's Exhibit 376, which is the  
3 memorandum Mr. Tone just identified, that we have -- excuse  
4 me, that is Plaintiff's Exhibit 87 -- that we have the  
5 agreement and the stipulation of the defendants to the  
6 admissibility of this exhibit.

7 MR. GOLDENBERG: To complete the understanding,  
8 there were certain documents that, if I may characterize  
9 them as coming from the same family or group, and defendants  
10 might be offering one or more of those documents, with no  
11 objection from the plaintiff, and they have been advised as  
12 to their identifying numbers.

13 MR. MATHIAS: That is correct, your Honor.

14 THE COURT: That exhibit will be admitted then.

15 (Plaintiff's Ex. 87 was received in evidence.)

16 MR. TONE: Very well. The second exhibit, your  
17 Honor, is Exhibit 376, which purports to be a memorandum by  
18 Mr. Robbins of a meeting held on December 17, 1974. The  
19 memorandum is dated seven days later, and I wish to offer  
20 this as a business record.

21 I think Mr. Lynch is willing to stipulate as  
22 to its authenticity, but I think if it is to come in as a  
23 business record, I need to show that it is a record that was  
24 made in the ordinary course of business and it was the  
25 ordinary course of business to make and maintain such record.

1 Mr. Lynch asked some question about that, and  
2 I have a witness here in case it is necessary to call her.

3 MR. LYNCH: The point, your Honor, is this. This  
4 is an internal memorandum. The reason it seeks to be intro-  
5 duced is because it says, "We discussed the solid state  
6 flipper in Milwaukee. Everyone who saw the game was extremely  
7 impressed."

8 It has to do with that hearsay statement  
9 about being impressed.

10 Now, Mr. Conroy was one of the people who was  
11 there. Other people of their controller people were there.

12 I don't mind it coming in but for the hearsay of  
13 people being impressed. I just have an objection, your  
14 Honor.

15 It is authentic. It bears the date it pur-  
16 ports to bear. It is just that I don't believe corporations  
17 make these as business records, recording people's reactions.

18 THE COURT: No, I think they do if you are in the  
19 game business and one of the things you are interested in  
20 is whether a game works, whether you are interested in  
21 purchasing them or devising them. Whether people are im-  
22 pressed is really the name of the game.

23 MR. LYNCH: There is another problem with it, your  
24 Honor, and the other problem is strangely enough they had  
25 two meetings following -- this is December. The October

1 meeting passed and the November meeting passed with no  
2 comment about what happened in Milwaukee.

3 THE COURT: Well, that goes to the weight of it.  
4 I mean, if the testimony is to be --

5 MR. LYNCH: But there is going to be no testimony.  
6 That is the problem, your Honor. There is going to be no  
7 testimony. It is going to get put in as a business record,  
8 and I have no one to ask, "How come was it it took two months  
9 to record that people were impressed on this issue when there  
10 were two meetings in between that are silent on the topic?"

11 THE COURT: Who prepared the document?

12 MR. LYNCH: It was prepared by Joe Robbins,  
13 chairman of the committee.

14 MR. TONE: Mr. Conroy, who was here as a witness,  
15 is one of the persons listed as in attendance at the meeting.

16 As your Honor says, that goes to the weight of the  
17 matter. We had Mr. Conroy here on the stand, but at any rate,  
18 Rule 803(6) of the Uniform Rules of Evidence, the Federal  
19 Rules of Evidence, covers memoranda of events as well as  
20 bookkeeping records. It is intended to be broad.

21 THE COURT: Well, of course it is a business record.  
22 The only question is whether there ought to be an opportunity  
23 to cross examine concerning the silence in the previous two  
24 months.

25 That really doesn't go to the admissibility,

1 it seems to me, though, of the document. It goes -- I guess  
2 normally that would be the person you would cross examine,  
3 the person who prepared the document.

4 I suppose they are really talking about two  
5 separate things.

6 You could call that person as an adverse  
7 witness.

8 MR. TONE: Right. He is no longer with Bally.

9 MR. KATZ: But he is located, I think --

10 MR. TONE: But he is located in Chicago, so he is  
11 available to be subpoenaed.



1 MR. LYNCH: It seems, your Honor --

2 MR. TONE: As a matter of fact, we can call him  
3 to authenticate the document.

4 There came a time when we had to attempt to  
5 shorten this proof, and we've eliminated a lot of witnesses  
6 we had on our list.

7 MR. LYNCH: Your Honor, I have no objection to it  
8 subject to the fact that it's understood we can argue the  
9 weight of it because of that. Because I don't know if they  
10 were impressed the last week, you know, the week before  
11 September 26th.

12 This is going to be offered for evidence that  
13 it was September 26, and I think there's a strange silence  
14 there. So, subject to that, your Honor --

15 THE COURT: All right, I'll receive it as a busi-  
16 ness record, and then you can argue the weight of it.

17 (Plaintiff's Exhibit 376 admitted into evidence.)

18 MR. TONE: Very well. Those are the two.

19 We have a fairly long list, and I think most  
20 of those we can handle without any dispute, and we'll be  
21 prepared to do that tomorrow.

22 THE COURT: All right. Okay. Ten o'clock tomorrow  
23 morning.

24 MR. TONE: Thank you.

25 THE COURT: How long will the redirect be?

1 MR. KATZ: Not too long, your Honor. Maybe an hour,  
2 something like that.

3 THE COURT: All right. And then the plaintiff  
4 rests, is that it?

5 MR. TONE: After we introduce the documents, your  
6 Honor. We have that list of documents to go through, and  
7 there may be some questions of admissibility.

8 THE COURT: All right.

9 (Recess at 5:05 to March 28 at 10:00 a.m.)  
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